Weston Solutions, Inc.
Suite 201
1090 King Georges Post Road
Edison, New Jersey 08837-3703
732-585-4400 • Fax: 732-225-7037
www.westonsolutions.com

The Trusted Integrator for Sustainable Solutions

REMOVAL SUPPORT TEAM 3
EPA CONTRACT EP-S2-14-01

RST 3-02-F-0027

TRANSMITTAL MEMO

To: Mr. Mark Bellis, On-Scene Coordinator
Removal Action Branch
U.S. EPA, Region II

From: Smita Sumbaly, Data Reviewer
RST 3, Region II

Subject: Wildroot Building Site
Data Validation Assessment

Date: October 9, 2014

The purpose of this memo is to transmit the following information:

- Data validation results for the following parameters:

TCL VOCs	5 Samples
TCL SVOC and PCBS	7 Samples
TCL Pesticide	11 Samples

- Matrices and Number of Samples

Soil	7 Samples
Liquid/Solid Waste	11 Samples

- Sampling Dates: August 6 and 7, 2014

The final data assessment narrative and original analytical data package are attached.

cc:

RST 3 SPM:	Joel Siegel
RST 3 SITE FILE TDD #:	TO-0001-0018
RST 3 ANALYTICAL TDD #:	TO-0001-0051
TASK#:	1051

U.S. ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: October 9, 2014

TO: Mark Bellis
U.S. EPA, Region II

FROM: Smita Sumbaly
RST 3 Data Review Team

SUBJECT: **QA/QC Compliance Review Summary**

As requested quality control and performance measures for the data packages noted have been examined and compared to EPA standards for compliance. Measures for the following general areas were evaluated as applicable:

Data Completeness	Blanks
Initial Calibration	Continuing Calibration
Matrix Spike	Laboratory Control Sample
Holding Times	Internal Standard
Surrogate Recovery	Field Duplicate
GC/MS Tuning	

Summary of Results

	VOC	SVOC	PEST/PCB
Acceptable as Submitted		X	
Acceptable with Comments	X		X
Unacceptable, Action Pending			
Unacceptable			

Data Reviewed by: Smita Sumbaly Date: October 9, 2014

Approved By: Date: 10/9/14

Area Code/Phone No.: (732) 585-4410

NARRATIVE

PCS No. 1051

SITE NAME: Wildroot Building Site
1740 Bailey Avenue
Buffalo, Erie County
New York

Laboratory Name: Compuchem a Division of Liberty Analytical Corporation, 501 Madison Avenue, Cary, NC 27513.

INTRODUCTION:

The laboratory's portion of this Case consisted of seven soil samples and 11 liquid/solid waste samples collected on August 6 and 7, 2014. The laboratory report numbers are 1408019, 1408024, and 1408028.

The laboratory reported problem(s) with the receipt of these samples: Laboratory did not receive percent moisture jar sample for Sample no. P001-S005-0002-01, therefore, sample was not analyzed for VOCs.

The laboratory reported Surrogate recovery, MS/MSD recoveries and calibration recovery problems with some analyses.

The evaluator has commented on the criteria specified under each fraction heading. All criteria have been assessed, but no discussion is given where the evaluator has determined that criteria were adequately performed or require no comment. Details relevant to these comments are given on the following forms.

Appropriate Form Is and Chain of Custody have been copied from the original data package and appended to the data assessment narrative for reference.

Organic:

_Y_ Holding Time	_Y_ MS/MSD
_Y_ GC/MS Tuning	_Y_ Compound ID (HSL, TIC)
_Y_ Calibration, Initial	_Y_ Spectra Quality (GC/MS only)
_Y_ Calibration, Continuing	_Y_ Standards
_Y_ Blank	_Y_ Chromatography
_Y_ Surrogate Recovery	_Y_ Data Completeness
_Y_ Laboratory Control Sample	

Comments:

1. Refer to Data Assessment Narrative.

REGION II RST 2 DATA ASSESSMENT REPORT

SITE: Wildroot Building Site **SDG No.:** 1408024

LAB: Compuchem a Division of Liberty Analytical Corporation, 501 Madison Avenue, Cary, NC.

ANALYSIS: Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs), and Polychlorinated Biphenyls (PCBs)

No. of Samples/Matrix: 7 soil

CONTRACTOR: RST 3

The following table summarizes the analytical methods used for the requested analyses and the U.S. EPA, Region 2 data validation standard operating procedures (SOPs) used for data validation.

Analysis	Analytical Method	Data Validation SOP No.
VOCs	SW-846 Method 8260B	No. HW-24 (Revision 3), December 2010
SVOCs	SW-846 Method 8270D	No. HW-22 (Revision 5), December 2010
PCBs	SW-846 Method 8082A	No. HW-45 (Revision 1.1), December 2010

All data were found to be valid and acceptable except those analytes which have been rejected, "R" (unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's Signature: Smita Sumbaly **Date:** 10/09/2014

Verified By: _____ **Date:** 10/9/14

On August 7, 2014, U.S. EPA, Region II, RST 3 personnel collected six soil samples for VOC analysis and seven soil samples for SVOC and PCB analyses from the Wildroot Building Site, located in Buffalo, Erie County, New York. One soil sample (P001-S005-0002-01) was unable to be analyzed for VOCs due to lack of volume. These samples were shipped under Chain of Custody for the requested analysis to Compuchem a Division of Liberty Analytical Corporation, 501 Madison Avenue, Cary, North Carolina. The laboratory verified that samples were received intact, properly sealed, and refrigerated. Sample cooler temperatures measured 5.2°C.

Field Sample ID	Lab Sample ID	Matrix	Analysis	Sampling Date
SDG 1408024				
P001-S002-0002-01	1408024-01	Soil	VOC, SVOC, and PCB	8/07/2014
P001-S003-0002-01	1408024-02	Soil	VOC, SVOC, and PCB	8/07/2014
P001-S003-0002-02[1]	1408024-03	Soil	VOC, SVOC, and PCB	8/07/2014
P001-S006-0002-01	1408024-04	Soil	VOC, SVOC, and PCB	8/07/2014
P001-S001-0002-01	1408024-05	Soil	VOC, SVOC, and PCB	8/07/2014
P001-S004-0002-01/DL	1408024-06/RE	Soil	SVOC and PCB	8/07/2014
P001-S005-0002-01*	1408024-07	Soil	SVOC and PCB	8/07/2014

1 A field duplicate of P001-S003-0002-01
* Due to insufficient sample volume VOC analysis was not performed.

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.

All holding times were met.

2. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

VOC All surrogate recoveries were acceptable.

SVOC Three out of six surrogate recoveries were <10 % (0.0%) outside control limits in MS/MS and all six surrogate recoveries were <10 % (0.0%) outside control limits in sample P001-S004-0002-01. All the samples, with the exception of sample P001-S005-0002-01, were analyzed with 10x dilution factor; no qualifiers were applied to results obtained from the 10x dilution analysis because the surrogates should have been lost in the dilution.

PCB All surrogate recoveries were acceptable.

3. MATRIX SPIKE/SPIKE DUPLICATE (MS/MSD):

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

VOC The low-level MS/MSD analyses, performed on sample P001-S003-0002-01, yielded low MS recoveries for two compounds, low MSD recoveries for 13 compounds and Relative Percent Difference (RPD) above the acceptance criteria for 49 compounds. Since the laboratory control sample analysis yielded acceptable recoveries, the non-compliant recoveries in MS/MSD were most likely caused by matrix interference. No action was taken.

SVOC Thirty-six out of 130 spike recoveries were outside the control limits in the analyses of MS/MSD of P001-S003-0002-01. Since the laboratory control sample yielded acceptable recoveries for all analytes, the non-compliant MS/MSD recoveries were most likely caused by matrix interference. No action was taken.

PCB All MS/MSD recoveries were acceptable.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than 5 times the blank contaminant level (10 times for common contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

A) Method blank contamination:

VOC Blank analysis did not indicate the presence of lab contamination.

SVOC Blank analysis did not indicate the presence of lab contamination.

PCB Blank analysis did not indicate the presence of lab contamination.

B) Field or rinse blank contamination:

Not applicable.

C) Trip blank contamination:

Not applicable.

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semivolatiles Decafluorotriphenyl-phosphine (DFTPP).

If the mass calibration is in error, all associated data will be classified as unusable "R".

None required qualifications.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be ≥ 0.05 in both initial and continuing calibrations. A value < 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

VOC None required qualifications.

SVOC None required qualifications.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance.

Percent RSD must be < 20% and %D must be < 20%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PCB fraction, if %RSD exceeds 20% for all analytes except for the two surrogates (which must not exceed 30% RSD), or if the %D of calibration verification exceeds 20%, qualify all associated positive results "J" and non-detects "UJ".
The following analytes in the sample shown were qualified for %RSD and %D:

VOC Several other compounds exceeded the %D criteria in Calibration form. Since, those compounds were not listed in Form Is, no action was required.

Calibration Date/Time	Calibration Type	Analyte	Affected Samples	Action (+/-)
8/11/14 19:16	SCV	Dichlorodifluoromethane, Vinyl Chloride, Bromomethane, Cyclohexane, Methylcyclohexane, Tetrachloroethene, Styrene, and Isoprpylbenzene,	P001-S002-0002-01 P001-S003-0002-01 P001-S003-0002-02 P001-S006-0002-01 P001-S001-0002-01	J/UJ

(+/-) – (detection/non-detected)
SCV – Second-Source Calibration Verification

SVOC The 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Pentachlorophenol, and 2,4-Dinitrotoluene RSD's were greater than 20% in the initial calibration. Since above compounds were not detected in any samples, no action was required.

PCB The continuing calibration verifications analyzed on 8/15/14 at 08:56 yielded %D>20 (failed) for the Aroclor 1260 on both columns. Sample P001-S004-0002-01 was re-analyzed with dilution factor 10 and yielded acceptable results for all analytes, but the Aroclor 1260 present in the neat analysis was not detected. Using professional judgment the results from the re-analysis were used for reporting purposes and Aroclor 1260 results will be transferred from original analysis to dilution analysis.

Aroclor 1260 - J – P001-S004-0002-01

7. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. If the area count is greater than 100% of the associated calibration verification standard, all of the positive results for compounds quantified using that IS are qualified as estimated, "J". If the area count is less than 50% of the associated calibration verification standard, all of the positive results for compounds quantified using that IS are qualified as estimated, "J", and the non-detects rejected, "R".

If an internal standard retention time varies by more than 30 seconds, the reviewer will use professional judgment to determine either partial or total rejection of the data for that sample fraction.

VOC None

SVOC None

8. COMPOUND IDENTIFICATION:

A) Volatile and Semivolatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

VOC None
SVOC None

B) PCB Fraction:

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract.

Aroclor-1260 concentrations varied more than 25% between two columns for sample P001-S004-0002-01. The Aroclor-1260 result was estimated (J).

Aroclor 1260 – J - P001-S004-0002-01

Aroclor 1254 have percent difference between 70 to 100%. The Aroclor-1254 result was qualified as NJ.

Aroclor 1254 – NJ - P001-S003-0002-01

9. METHOD NON-COMPLIANCE:

VOC

- According to Chain of Custody record, additional volume was collected for MS/MSD analysis but data reviewer could not find matrix spike recovery form in data package. Data reviewer contacted the laboratory, obtained the MS/MSD data and inserted in data package.

10. OTHERS:

- **Field Duplicate** - Incomparable results were observed for **Acetone** in soil field duplicate pair P001-S003-0002-01/P001-S003-002-02. Differences between sample and duplicate values were > 2 X RL. Detected analytes are qualified J and Non-detected analytes are qualified UJ in the original and duplicate sample.

SVOC:

- Surrogate recoveries were reported as 0% for three out of six surrogates in MS/MSD and all surrogate recoveries 0.0% in sample P001-S004-0002-01. Due to bad matrix, samples were not reanalyzed.

- SVOC:A 10-fold dilution was performed for all samples except sample P001-S005-0002-01 due to bad sample matrix and presence of hydrocarbons.

- Field duplicate pair P001-S003-0002-01 and P001-S003-0002-02: qualification was not required as the relative percent difference of all results were <50%.

- Laboratory revised the surrogate MDLs and rearranged the report. All surrogate recoveries were within the acceptable range except MS/MSD and P001-S004-0002-01. Revised surrogate forms were replaced in hard copy data package.

- Laboratory reported on Form Is that N-nitrosodiphenylamine cannot be separated from diphenylamine and 3 & 4-Methylphenol cannot be separated for quantitation. Both compounds were not detected in any samples.

PCB

- All samples were extracted and analyzed within holding times. Florisil cleanup was not performed. All method and instrument blanks were free of contaminants. Sample P001-S004-0002-01 was analyzed at a 10x dilution which resulted in elevated reporting limits.

- Due to matrix interference, the undiluted analysis of sample P001-S004-0002-01 yielded continuing calibration recoveries above 20%. The sample was re-analyzed at a 10x dilution yielding acceptable continuing calibration recoveries. The 10x dilution was used for reporting purpose with the exceptions of the Aroclor 1260. These analyte was detected in the undiluted analysis but lost in dilution; therefore their estimated concentrations were reported from the undiluted analysis.

- Field duplicate pair P001-S003-0002-01 and P001-S003-0002-02: qualification was not required as the relative percent difference of all results were <50%.

- Sample no. P001-S004-0002-01 was prepared using the waste dilution method 3580A, by diluting 1.0 g of sample to 5 ml in hexane and then analyzed by method 8082A.

OTHER ANALYTES WORK TABLE

PROJECT: Wildroot Building Site
SAMPLING DATE: August 7, 2014
SAMPLE #/CONCENTRATION (ug/Kg)

Volatile Organic Compounds (ug/Kg)	Matrix	Soil		Soil		Soil		Soil	
	Field Sample ID	P001-S001-0002-01		P001-S002-0002-01		P001-S003-0002-01		P001-S003-0002-02[1]	
	Lab Sample ID	1408024-05		1408024-01		1408024-02		1408024-03	
	Sample Wt./Vol.	3.1 g/5 ml		3.39 g/5 ml		3.39 g/5 ml		3.68 g/5 ml	
	% Moisture	9		9		4		4	
	Dilution Factor	1		1		1		1	
	MDL								
Dichlorodifluoromethane	0.44	U	J	U	J	U	J	U	J
Chloromethane	0.32	U		U		U		U	
Vinyl Chloride	0.42	U	J	U	J	U	J	U	J
Bromomethane	0.58	U	J	U	J	U	J	4.7	J
Chloroethane	0.71	U		U		U		U	
Trichlorofluoromethane	0.30	U		U		U		U	
1,1-Dichloroethene	1.1	U		U		U		U	
Acetone	5.0	U		U		320		U	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.51	U		U		U		U	
Carbon Disulfide	0.14	U		U		U		U	
Methyl Acetate	1.4	U		U		U		U	
Methylene Chloride	0.49	U		U		U		U	
trans-1,2-Dichloroethene	1.0	U		U		U		U	
Methyl tert-butyl ether	0.39	U		U		U		U	
1,1-Dichloroethane	0.47	U		U		U		U	
cis-1,2-Dichloroethene	0.42	U		U		U		U	
2-Butanone	1.3	U		U		22		U	
Chloroform	0.31	U		U		U		U	
1,1,1-Trichloroethane	0.50	U		U		U		U	
Cyclohexane	0.31	U	J	U	J	U	J	U	J
Carbon Tetrachloride	0.45	U		U		U		U	
1,2-Dichloroethane	0.27	U		U		U		U	
Benzene	0.31	U		U		U		U	
Trichloroethene	0.32	U		U		U		U	
Methylcyclohexane	0.28	U	J	U	J	U	J	U	J
1,2-Dichloropropane	0.63	U		U		U		U	
Bromodichloromethane	0.38	U		U		U		U	
cis-1,3-Dichloropropene	0.39	U		U		U		U	
4-Methyl-2-Pentanone	1.3	U		U		U		U	
Toluene	0.34	U		U		U		U	
trans-1,3-Dichloropropene	0.41	U		U		U		U	
1,1,2-Trichloroethane	0.72	U		U		U		U	
Tetrachloroethene	1.6	U	J	U	J	U	J	U	J
2-Hexanone	1.0	U		U		U		U	
Dibromochloromethane	0.56	U		U		U		U	
1,2-Dibromoethane	0.22	U		U		U		U	
Chlorobenzene	0.25	U		U		U		U	

OTHER ANALYTES WORK TABLE

PROJECT: Wildroot Building Site
SAMPLING DATE: August 7, 2014
SAMPLE #/CONCENTRATION (ug/Kg)

Volatile Organic Compounds (ug/Kg)	Matrix	Soil	Soil	Soil	Soil
	Field Sample ID	P001-S001-0002-01	P001-S002-0002-01	P001-S003-0002-01	P001-S003-0002-02[1]
	Lab Sample ID	1408024-05	1408024-01	1408024-02	1408024-03
	Sample Wt./Vol.	3.1 g/5 ml	3.39 g/5 ml	3.39 g/5 ml	3.68 g/5 ml
	% Moisture	9	9	4	4
	Dilution Factor	1	1	1	1
	MDL				
Ethylbenzene	0.58	U	U	U	U
m,p-Xylene	0.14	U	U	U	U
o-Xylene	0.38	U	U	U	U
Styrene	0.080	U J	U J	U J	U J
Bromoform	1.1	U	U	U	U
Isopropylbenzene	0.22	U J	U J	U J	U J
1,1,2,2-Tetrachloroethane	0.37	U	U	U	U
1,3-Dichlorobenzene	0.27	U	U	U	U
1,4-Dichlorobenzene	0.21	U	U	U	U
1,2-Dichlorobenzene	0.36	U	U	U	U
1,2-Dibromo-3-chloropropane	0.65	U	U	U	U
1,2,4-Trichlorobenzene	0.35	U	U	U	U
Xylenes (total)	0.14	U	U	U	U

[1] A field duplicate of P001-S003-0002-01

Sample Wt./Vol. = Sample weight/volume

MDL - Method Detection Limit

Note: MDL reported on the Form Is for the soil matrix have been adjusted to reflect the sample percent moisture, weight,volume and dilution factor.

U = non-detected

J = estimate result

OTHER ANALYTES WORK TABLE

PROJECT: Wildroot Building Site
SAMPLING DATE: August 7, 2014
SAMPLE #/CONCENTRATION (ug/Kg)

Volatile Organic Compounds (ug/Kg)	Matrix	Soil	
	Field Sample ID	P001-S006-0002-01	
	Lab Sample ID	1408024-04	
	Sample Wt./Vol.	3.93 g/5 ml	
	% Moisture	22	
	Dilution Factor	1	
	MDL		
Dichlorodifluoromethane	0.44	U	J
Chloromethane	0.32	U	
Vinyl Chloride	0.42	U	J
Bromomethane	0.58	U	J
Chloroethane	0.71	U	
Trichlorofluoromethane	0.30	U	
1,1-Dichloroethene	1.1	U	
Acetone	5.0	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.51	U	
Carbon Disulfide	0.14	U	
Methyl Acetate	1.4	U	
Methylene Chloride	0.49	U	
trans-1,2-Dichloroethene	1.0	U	
Methyl tert-butyl ether	0.39	U	
1,1-Dichloroethane	0.47	U	
cis-1,2-Dichloroethene	0.42	U	
2-Butanone	1.3	U	
Chloroform	0.31	U	
1,1,1-Trichloroethane	0.50	U	
Cyclohexane	0.31	U	J
Carbon Tetrachloride	0.45	U	
1,2-Dichloroethane	0.27	U	
Benzene	0.31	U	
Trichloroethene	0.32	U	
Methylcyclohexane	0.28	U	J
1,2-Dichloropropane	0.63	U	
Bromodichloromethane	0.38	U	
cis-1,3-Dichloropropene	0.39	U	
4-Methyl-2-Pentanone	1.3	U	
Toluene	0.34	U	
trans-1,3-Dichloropropene	0.41	U	
1,1,2-Trichloroethane	0.72	U	
Tetrachloroethene	1.6	U	J
2-Hexanone	1.0	U	
Dibromochloromethane	0.56	U	
1,2-Dibromoethane	0.22	U	
Chlorobenzene	0.25	U	

OTHER ANALYTES WORK TABLE

PROJECT: Wildroot Building Site
SAMPLING DATE: August 7, 2014
SAMPLE #/CONCENTRATION (ug/Kg)

Volatile Organic Compounds (ug/Kg)	Matrix	Soil	
	Field Sample ID	P001-S006-0002-01	
	Lab Sample ID	1408024-04	
	Sample Wt./Vol.	3.93 g/5 ml	
	% Moisture	22	
	Dilution Factor	1	
	MDL		
Ethylbenzene	0.58	U	
m,p-Xylene	0.14	U	
o-Xylene	0.38	U	
Styrene	0.080	U	J
Bromoform	1.1	U	
Isopropylbenzene	0.22	U	J
1,1,2,2-Tetrachloroethane	0.37	U	
1,3-Dichlorobenzene	0.27	U	
1,4-Dichlorobenzene	0.21	U	
1,2-Dichlorobenzene	0.36	U	
1,2-Dibromo-3-chloropropane	0.65	U	
1,2,4-Trichlorobenzene	0.35	U	
Xylenes (total)	0.14	U	

Sample Wt./Vol. = Sample weight/volume

MDL - Method Detection Limit

Note: MDL reported on the Form Is for the soil matrix have been adjusted to reflect the sample percent moisture, weight,volume and dilution factor.

U = non-detected

J = estimate result

ANALYSES DATA PACKAGE COVER PAGE

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Laboratory: COMPUCHEM

SDG: 1408024

Client Sample Id:	Analysis:	Lab Sample Id:
P001-S002-0002-01	SW 8260B	1408024-01
P001-S003-0002-01	SW 8260B	1408024-02
P001-S003-0002-02	SW 8260B	1408024-03
P001-S006-0002-01	SW 8260B	1408024-04
P001-S001-0002-01	SW 8260B	1408024-05

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions addressed in the narrative. Release of the data contained in this hardcopy data package and in the Electronic Data Deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Quentisha Forrester Name: Quentisha Forrester

Date: 08/20/2014 Title: Chemist III

CompuChem
A Division Of
Liberty Analytical Corp.

501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050

CompuChem

A division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE
SDG # 1408024
PROTOCOL: SW-846

SAMPLE IDENTIFICATIONS:	**P001-S002-0002-01**	**P001-S003-0002-01**
P001-S003-0002-02	**P001-S006-0002-01**	**P001-S001-0002-01**

The 5 soil samples listed above were received intact, properly refrigerated at 5.2°C, with proper documentation, in sealed shipping containers, on August 8, 2014. The samples were scheduled for the requested analysis of the volatile fraction. SW-846, 3rd Edition, Update 3, Method 5035/8260B was used to prepare and analyze the samples, with the exceptions and/or additions requested by the client. All pertinent Quality Assurance notices are included in the narrative section, and all pertinent Laboratory notices for SDG# 1408024 are included in the sample data sections.

Volatiles

Analysis holding time requirements were met for these samples. The percent moisture value of the samples ranged from 4 to 22 percent.

There were volatile Project/Target Compound List (TCL) analytes identified above the Contract Required Quantitation Limit (CRQL) in these samples. All of the system monitoring compounds met recovery criteria in the analysis of these samples. All of the internal standards met response and retention time criteria in the analysis of these samples.

Manual integrations were performed in this SDG, as indicated on the spreadsheet in section S. The reasons have been explained in the notice included in the narrative section of the SDG.

All Bromofluorobenzene (BFB) abundance criteria were met for tunes associated to this SDG. All QC criteria were met for all initial and continuing calibration standards associated to this SDG. The second source standard VSTD050FT (4H11002-SCV1) failed QC criteria.

The associated method blanks met all quality control criteria.

P001-S003-0002-01 was used as the original to prepare the duplicate matrix spikes as requested. The associated duplicate matrix spikes met most of the advisory accuracy and precision criteria. The associated Laboratory Control Sample (LCS) met all quality control criteria.

I certify that the tests used in this report meet all requirements of the NELAC standards unless otherwise stated in the SDG narrative or QA notice. I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on CD has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Quentisha Forrester
Chemist III
August 20, 2014
October 7, 2014Revision

Revised

CompuChem

A division of Liberty Analytical Corporation

Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC/HPLC chemists. An Extracted Ion Current Profile (EICP) or a GC/HPLC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC/HPLC analysis. The manual editing/integration flags are:

M - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak. The most common reasons for performing manual integrations/editing are: the compound was not found by the automatic integration routine, the compound was incorrectly integrated by the automatic integration routine, and the co-eluting compounds were incorrectly integrated by the automatic integration routine.

H - Denotes that the data reviewer, GC/MS operator, or GC/HPLC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

MH - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

L - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

ML - Denotes that an alternate GC/MS library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

These codes will appear in the GC/MS and GC/HPLC raw data.

Revision 8 (01/29/2011)

ORGANIC DATA REPORTING QUALIFIERS

On the appropriate reporting form, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on the appropriate reporting form for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1:1 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide and/or Aroclor or other GC or HPLC identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search and must be used with the J flag. For generic characterization of a TIC such as "chlorinated hydrocarbon" (or for an "unknown," with no matches ≥ 85%), the N flag is not used.

P : In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the Form I and flagged with a P.
For SW-846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the lower of the two values is reported and flagged with a P on the reporting form. When the RPD is equal to or less than 40%, our policy is to also report the lower of the two values, although the choice could be a project specific issue. These SW-846 policies are consistent with Method 8000C. If Method 8000B is required, the higher of the two values is reported. For certain HPLC analyses, if one of the HPLC columns displays co-elution of target analytes, all results are reported from a primary column displaying no co-elution. Results are still flagged with a P if the RPD between columns is greater than 40%.

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

DATA REPORTING QUALIFIERS (continued)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a concentration greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a concentration greater than the upper level of the calibration range will have the result flagged with an E on the appropriate reporting form for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on the appropriate reporting form for the more diluted sample, and **all** reported concentrations on that form are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate reporting forms are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses <u>are not combined</u> on a single reporting form.

A: This flag indicates that a TIC is a suspected aldol-condensation product.

S: In the SOM01.2 SOW document, this flag is used to indicate an estimated value for Aroclor target compounds where a valid 5-point initial calibration was not performed prior to the analytes detection in a sample. If an "S" flag is used for a specific Aroclor, then a reanalysis of the sample is required after a valid 5-point calibration is performed for the detected Aroclor. The "S" flag is not utilized for non CLP analyses.

* This flag is applied to a target analyte when any QC acceptance criterion has not been met for that analyte. The flag appears on the reporting form of the associated QC analysis.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y, and Z.

ANALYSIS DATA SHEET

SW 8260B

P001-S001-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0559.d Sampled: 08/07/14 00:00

Initial/Final: 3.1g / 5mL Lab ID: 1408024-05 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 9 Analyzed: 08/11/14 23:54

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
75-71-8	Dichlorodifluoromethane		0.78	8.8	U J
74-87-3	Chloromethane		0.56	8.8	U
75-01-4	Vinyl chloride		0.74	8.8	U J
74-83-9	Bromomethane		1.0	8.8	U J
75-00-3	Chloroethane		1.3	8.8	U
75-69-4	Trichlorofluoromethane		0.53	8.8	U
75-35-4	1,1-Dichloroethene		1.9	8.8	U
67-64-1	Acetone		8.8	22	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.90	8.8	U
75-15-0	Carbon disulfide		0.25	8.8	U
79-20-9	Methyl acetate		2.5	8.8	U
75-09-2	Methylene chloride		0.86	8.8	U
156-60-5	trans-1,2-Dichloroethene		1.8	8.8	U
1634-04-4	Methyl tert-butyl ether		0.69	8.8	U
75-34-3	1,1-Dichloroethane		0.83	8.8	U
156-59-2	cis-1,2-Dichloroethene		0.74	8.8	U
78-93-3	2-Butanone		2.3	22	U
67-66-3	Chloroform		0.55	8.8	U
71-55-6	1,1,1-Trichloroethane		0.88	8.8	U
110-82-7	Cyclohexane		0.55	8.8	U J
56-23-5	Carbon tetrachloride		0.79	8.8	U
107-06-2	1,2-Dichloroethane		0.48	8.8	U
71-43-2	Benzene		0.55	8.8	U
79-01-6	Trichloroethene		0.56	8.8	U
108-87-2	Methylcyclohexane		0.49	8.8	U J
78-87-5	1,2-Dichloropropane		1.1	8.8	U
75-27-4	Bromodichloromethane		0.67	8.8	U
10061-01-5	cis-1,3-Dichloropropene		0.69	8.8	U
108-10-1	4-Methyl-2-pentanone		2.3	22	U
108-88-3	Toluene		0.60	8.8	U
10061-02-6	trans-1,3-Dichloropropene		0.72	8.8	U
79-00-5	1,1,2-Trichloroethane		1.3	8.8	U
127-18-4	Tetrachloroethene		2.8	8.8	U J
591-78-6	2-Hexanone		1.8	22	U
124-48-1	Dibromochloromethane		0.99	8.8	U

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH

nelac

ANALYSIS DATA SHEET

SW 8260B

P001-S001-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0559.d Sampled: 08/07/14 00:00

Initial/Final: 3.1g / 5mL Lab ID: 1408024-05 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 9 Analyzed: 08/11/14 23:54

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
106-93-4	1,2-Dibromoethane		0.39	8.8	U
108-90-7	Chlorobenzene		0.44	8.8	U
100-41-4	Ethylbenzene		1.0	8.8	U
179601-23-1	m,p-Xylene		0.25	18	U
95-47-6	o-Xylene		0.67	8.8	U
100-42-5	Styrene		0.14	8.8	U J
75-25-2	Bromoform		1.9	8.8	U
98-82-8	Isopropylbenzene		0.39	8.8	U J
79-34-5	1,1,2,2-Tetrachloroethane		0.65	8.8	U
541-73-1	1,3-Dichlorobenzene		0.48	8.8	U
106-46-7	1,4-Dichlorobenzene		0.37	8.8	U
95-50-1	1,2-Dichlorobenzene		0.63	8.8	U
96-12-8	1,2-Dibromo-3-chloropropane		1.1	8.8	U
120-82-1	1,2,4-Trichlorobenzene		0.62	8.8	U
1330-20-7	Xylenes (total)		0.25	8.8	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Dibromofluoromethane	88.19	87.48	99	71 - 141	
1,2-Dichloroethane-d4	88.19	93.20	106	70 - 139	
Toluene-d8	88.19	79.39	90	72 - 123	
Bromofluorobenzene	88.19	74.02	84	65 - 131	

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q

CompuChem
A Division Of
Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW 8260B

P001-S002-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0159.d Sampled: 08/07/14 00:00

Initial/Final: 3.39g / 5mL Lab ID: 1408024-01 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 9 Analyzed: 08/11/14 22:21

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
75-71-8	Dichlorodifluoromethane		0.72	8.1	U J
74-87-3	Chloromethane		0.52	8.1	U
75-01-4	Vinyl chloride		0.68	8.1	U J
74-83-9	Bromomethane		0.94	8.1	U J
75-00-3	Chloroethane		1.2	8.1	U
75-69-4	Trichlorofluoromethane		0.49	8.1	U
75-35-4	1,1-Dichloroethene		1.8	8.1	U
67-64-1	Acetone		8.1	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.83	8.1	U
75-15-0	Carbon disulfide		0.23	8.1	U
79-20-9	Methyl acetate		2.3	8.1	U
75-09-2	Methylene chloride		0.80	8.1	U
156-60-5	trans-1,2-Dichloroethene		1.6	8.1	U
1634-04-4	Methyl tert-butyl ether		0.63	8.1	U
75-34-3	1,1-Dichloroethane		0.76	8.1	U
156-59-2	cis-1,2-Dichloroethene		0.68	8.1	U
78-93-3	2-Butanone		2.1	20	U
67-66-3	Chloroform		0.50	8.1	U
71-55-6	1,1,1-Trichloroethane		0.81	8.1	U
110-82-7	Cyclohexane		0.50	8.1	U J
56-23-5	Carbon tetrachloride		0.73	8.1	U
107-06-2	1,2-Dichloroethane		0.44	8.1	U
71-43-2	Benzene		0.50	8.1	U
79-01-6	Trichloroethene		0.52	8.1	U
108-87-2	Methylcyclohexane		0.46	8.1	U J
78-87-5	1,2-Dichloropropane		1.0	8.1	U
75-27-4	Bromodichloromethane		0.62	8.1	U
10061-01-5	cis-1,3-Dichloropropene		0.63	8.1	U
108-10-1	4-Methyl-2-pentanone		2.1	20	U
108-88-3	Toluene		0.55	8.1	U
10061-02-6	trans-1,3-Dichloropropene		0.67	8.1	U
79-00-5	1,1,2-Trichloroethane		1.2	8.1	U
127-18-4	Tetrachloroethene		2.6	8.1	U J
591-78-6	2-Hexanone		1.6	20	U
124-48-1	Dibromochloromethane		0.91	8.1	U

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW 8260B

P001-S002-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0159.d Sampled: 08/07/14 00:00

Initial/Final: 3.39g / 5mL Lab ID: 1408024-01 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 9 Analyzed: 08/11/14 22:21

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
106-93-4	1,2-Dibromoethane		0.36	8.1	U
108-90-7	Chlorobenzene		0.41	8.1	U
100-41-4	Ethylbenzene		0.94	8.1	U
179601-23-1	m,p-Xylene		0.23	16	U
95-47-6	o-Xylene		0.62	8.1	U
100-42-5	Styrene		0.13	8.1	U J
75-25-2	Bromoform		1.8	8.1	U
98-82-8	Isopropylbenzene		0.36	8.1	U J
79-34-5	1,1,2,2-Tetrachloroethane		0.60	8.1	U
541-73-1	1,3-Dichlorobenzene		0.44	8.1	U
106-46-7	1,4-Dichlorobenzene		0.34	8.1	U
95-50-1	1,2-Dichlorobenzene		0.59	8.1	U
96-12-8	1,2-Dibromo-3-chloropropane		1.1	8.1	U
120-82-1	1,2,4-Trichlorobenzene		0.57	8.1	U
1330-20-7	Xylenes (total)		0.23	8.1	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Dibromofluoromethane	81.30	78.97	97	71 - 141	
1,2-Dichloroethane-d4	81.30	82.08	101	70 - 139	
Toluene-d8	81.30	76.93	95	72 - 123	
Bromofluorobenzene	81.30	79.58	98	65 - 131	

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q

CompuChem
A Division Of
Liberty Analytical Corp

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW 8260B

P001-S003-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0259.d Sampled: 08/07/14 00:00

Initial/Final: 3.39g / 5mL Lab ID: 1408024-02 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 4 Analyzed: 08/12/14 00:25

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
75-71-8	Dichlorodifluoromethane		0.67	7.7	U J
74-87-3	Chloromethane		0.49	7.7	U
75-01-4	Vinyl chloride		0.64	7.7	U J
74-83-9	Bromomethane		0.89	7.7	U J
75-00-3	Chloroethane		1.1	7.7	U
75-69-4	Trichlorofluoromethane		0.46	7.7	U
75-35-4	1,1-Dichloroethene		1.7	7.7	U
67-64-1	Acetone	320	7.7	19	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.78	7.7	U
75-15-0	Carbon disulfide		0.21	7.7	U
79-20-9	Methyl acetate		2.1	7.7	U
75-09-2	Methylene chloride		0.75	7.7	U
156-60-5	trans-1,2-Dichloroethene		1.5	7.7	U
1634-04-4	Methyl tert-butyl ether		0.60	7.7	U
75-34-3	1,1-Dichloroethane		0.72	7.7	U
156-59-2	cis-1,2-Dichloroethene		0.64	7.7	U
78-93-3	2-Butanone	22	2.0	19	
67-66-3	Chloroform		0.48	7.7	U
71-55-6	1,1,1-Trichloroethane		0.77	7.7	U
110-82-7	Cyclohexane		0.48	7.7	U J
56-23-5	Carbon tetrachloride		0.69	7.7	U
107-06-2	1,2-Dichloroethane		0.41	7.7	U
71-43-2	Benzene		0.48	7.7	U
79-01-6	Trichloroethene		0.49	7.7	U
108-87-2	Methylcyclohexane		0.43	7.7	U J
78-87-5	1,2-Dichloropropane		0.97	7.7	U
75-27-4	Bromodichloromethane		0.58	7.7	U
10061-01-5	cis-1,3-Dichloropropene		0.60	7.7	U
108-10-1	4-Methyl-2-pentanone		2.0	19	U
108-88-3	Toluene		0.52	7.7	U
10061-02-6	trans-1,3-Dichloropropene		0.63	7.7	U
79-00-5	1,1,2-Trichloroethane		1.1	7.7	U
127-18-4	Tetrachloroethene		2.5	7.7	U J
591-78-6	2-Hexanone		1.5	19	U
124-48-1	Dibromochloromethane		0.86	7.7	U

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW 8260B

P001-S003-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0259.d Sampled: 08/07/14 00:00

Initial/Final: 3.39g / 5mL Lab ID: 1408024-02 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 4 Analyzed: 08/12/14 00:25

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
106-93-4	1,2-Dibromoethane		0.34	7.7	U
108-90-7	Chlorobenzene		0.38	7.7	U
100-41-4	Ethylbenzene		0.89	7.7	U
179601-23-1	m,p-Xylene		0.21	15	U
95-47-6	o-Xylene		0.58	7.7	U
100-42-5	Styrene		0.12	7.7	U J
75-25-2	Bromoform		1.7	7.7	U
98-82-8	Isopropylbenzene		0.34	7.7	U J
79-34-5	1,1,2,2-Tetrachloroethane		0.57	7.7	U
541-73-1	1,3-Dichlorobenzene		0.41	7.7	U
106-46-7	1,4-Dichlorobenzene		0.32	7.7	U
95-50-1	1,2-Dichlorobenzene		0.55	7.7	U
96-12-8	1,2-Dibromo-3-chloropropane		1.0	7.7	U
120-82-1	1,2,4-Trichlorobenzene		0.54	7.7	U
1330-20-7	Xylenes (total)		0.21	7.7	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Dibromofluoromethane	76.64	74.48	97	71 - 141	
1,2-Dichloroethane-d4	76.64	80.30	105	70 - 139	
Toluene-d8	76.64	74.59	97	72 - 123	
Bromofluorobenzene	76.64	67.70	88	65 - 131	

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW 8260B

P001-S003-0002-02

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0359.d Sampled: 08/07/14 00:00

Initial/Final: 3.68g / 5mL Lab ID: 1408024-03 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 4 Analyzed: 08/11/14 22:52

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
75-71-8	Dichlorodifluoromethane		0.62	7.1	U J
74-87-3	Chloromethane		0.45	7.1	U
75-01-4	Vinyl chloride		0.59	7.1	U J
74-83-9	Bromomethane	4.7	0.82	7.1	J
75-00-3	Chloroethane		1.0	7.1	U
75-69-4	Trichlorofluoromethane		0.42	7.1	U
75-35-4	1,1-Dichloroethene		1.6	7.1	U
67-64-1	Acetone		7.1	18	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.72	7.1	U
75-15-0	Carbon disulfide		0.20	7.1	U
79-20-9	Methyl acetate		2.0	7.1	U
75-09-2	Methylene chloride		0.69	7.1	U
156-60-5	trans-1,2-Dichloroethene		1.4	7.1	U
1634-04-4	Methyl tert-butyl ether		0.55	7.1	U
75-34-3	1,1-Dichloroethane		0.66	7.1	U
156-59-2	cis-1,2-Dichloroethene		0.59	7.1	U
78-93-3	2-Butanone		1.8	18	U
67-66-3	Chloroform		0.44	7.1	U
71-55-6	1,1,1-Trichloroethane		0.71	7.1	U
110-82-7	Cyclohexane		0.44	7.1	U J
56-23-5	Carbon tetrachloride		0.64	7.1	U
107-06-2	1,2-Dichloroethane		0.38	7.1	U
71-43-2	Benzene		0.44	7.1	U
79-01-6	Trichloroethene		0.45	7.1	U
108-87-2	Methylcyclohexane		0.40	7.1	U J
78-87-5	1,2-Dichloropropane		0.89	7.1	U
75-27-4	Bromodichloromethane		0.54	7.1	U
10061-01-5	cis-1,3-Dichloropropene		0.55	7.1	U
108-10-1	4-Methyl-2-pentanone		1.8	18	U
108-88-3	Toluene		0.48	7.1	U
10061-02-6	trans-1,3-Dichloropropene		0.58	7.1	U
79-00-5	1,1,2-Trichloroethane		1.0	7.1	U
127-18-4	Tetrachloroethene		2.3	7.1	U J
591-78-6	2-Hexanone		1.4	18	U
124-48-1	Dibromochloromethane		0.79	7.1	U

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH

nelac

ANALYSIS DATA SHEET

SW 8260B

P001-S003-0002-02

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0359.d Sampled: 08/07/14 00:00

Initial/Final: 3.68g / 5mL Lab ID: 1408024-03 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 4 Analyzed: 08/11/14 22:52

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
106-93-4	1,2-Dibromoethane		0.31	7.1	U
108-90-7	Chlorobenzene		0.35	7.1	U
100-41-4	Ethylbenzene		0.82	7.1	U
179601-23-1	m,p-Xylene		0.20	14	U
95-47-6	o-Xylene		0.54	7.1	U
100-42-5	Styrene		0.11	7.1	U J
75-25-2	Bromoform		1.6	7.1	U
98-82-8	Isopropylbenzene		0.31	7.1	U J
79-34-5	1,1,2,2-Tetrachloroethane		0.52	7.1	U
541-73-1	1,3-Dichlorobenzene		0.38	7.1	U
106-46-7	1,4-Dichlorobenzene		0.30	7.1	U
95-50-1	1,2-Dichlorobenzene		0.51	7.1	U
96-12-8	1,2-Dibromo-3-chloropropane		0.92	7.1	U
120-82-1	1,2,4-Trichlorobenzene		0.49	7.1	U
1330-20-7	Xylenes (total)		0.20	7.1	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Dibromofluoromethane	70.65	65.93	93	71 - 141	
1,2-Dichloroethane-d4	70.65	72.09	102	70 - 139	
Toluene-d8	70.65	64.32	91	72 - 123	
Bromofluorobenzene	70.65	69.54	98	65 - 131	

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW 8260B

P001-S006-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0459.d Sampled: 08/07/14 00:00

Initial/Final: 3.93g / 5mL Lab ID: 1408024-04 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 22 Analyzed: 08/11/14 23:23

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
75-71-8	Dichlorodifluoromethane		0.72	8.2	U J
74-87-3	Chloromethane		0.52	8.2	U
75-01-4	Vinyl chloride		0.68	8.2	U J
74-83-9	Bromomethane		0.95	8.2	U J
75-00-3	Chloroethane		1.2	8.2	U
75-69-4	Trichlorofluoromethane		0.49	8.2	U
75-35-4	1,1-Dichloroethene		1.8	8.2	U
67-64-1	Acetone		8.2	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.83	8.2	U
75-15-0	Carbon disulfide		0.23	8.2	U
79-20-9	Methyl acetate		2.3	8.2	U
75-09-2	Methylene chloride		0.80	8.2	U
156-60-5	trans-1,2-Dichloroethene		1.6	8.2	U
1634-04-4	Methyl tert-butyl ether		0.64	8.2	U
75-34-3	1,1-Dichloroethane		0.77	8.2	U
156-59-2	cis-1,2-Dichloroethene		0.68	8.2	U
78-93-3	2-Butanone		2.1	20	U
67-66-3	Chloroform		0.51	8.2	U
71-55-6	1,1,1-Trichloroethane		0.82	8.2	U
110-82-7	Cyclohexane		0.51	8.2	U J
56-23-5	Carbon tetrachloride		0.73	8.2	U
107-06-2	1,2-Dichloroethane		0.44	8.2	U
71-43-2	Benzene		0.51	8.2	U
79-01-6	Trichloroethene		0.52	8.2	U
108-87-2	Methylcyclohexane		0.46	8.2	U J
78-87-5	1,2-Dichloropropane		1.0	8.2	U
75-27-4	Bromodichloromethane		0.62	8.2	U
10061-01-5	cis-1,3-Dichloropropene		0.64	8.2	U
108-10-1	4-Methyl-2-pentanone		2.1	20	U
108-88-3	Toluene		0.55	8.2	U
10061-02-6	trans-1,3-Dichloropropene		0.67	8.2	U
79-00-5	1,1,2-Trichloroethane		1.2	8.2	U
127-18-4	Tetrachloroethene		2.6	8.2	U J
591-78-6	2-Hexanone		1.6	20	U
124-48-1	Dibromochloromethane		0.91	8.2	U

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW 8260B

P001-S006-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0459.d Sampled: 08/07/14 00:00

Initial/Final: 3.93g / 5mL Lab ID: 1408024-04 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 22 Analyzed: 08/11/14 23:23

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
106-93-4	1,2-Dibromoethane		0.36	8.2	U
108-90-7	Chlorobenzene		0.41	8.2	U
100-41-4	Ethylbenzene		0.95	8.2	U
179601-23-1	m,p-Xylene		0.23	16	U
95-47-6	o-Xylene		0.62	8.2	U
100-42-5	Styrene		0.13	8.2	U J
75-25-2	Bromoform		1.8	8.2	U
98-82-8	Isopropylbenzene		0.36	8.2	U J
79-34-5	1,1,2,2-Tetrachloroethane		0.60	8.2	U
541-73-1	1,3-Dichlorobenzene		0.44	8.2	U
106-46-7	1,4-Dichlorobenzene		0.34	8.2	U
95-50-1	1,2-Dichlorobenzene		0.59	8.2	U
96-12-8	1,2-Dibromo-3-chloropropane		1.1	8.2	U
120-82-1	1,2,4-Trichlorobenzene		0.57	8.2	U
1330-20-7	Xylenes (total)		0.23	8.2	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Dibromofluoromethane	81.53	82.78	102	71 - 141	
1,2-Dichloroethane-d4	81.53	88.09	108	70 - 139	
Toluene-d8	81.53	76.99	94	72 - 123	
Bromofluorobenzene	81.53	82.17	101	65 - 131	

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

B. Chain of Custody Records

The laboratory shall include a copy of the Chain-of-Custody (CoC) documentation for all of the samples in the Work Order/SDG.

USEPA
DateShipped: 8/7/2014
CarrierName: FedEx
AirbillNo: 7707 8581 7446

CHAIN OF CUSTODY RECORD
Case #: 306
Contact Name: Peter Lisichenko
Contact Phone: 6035124350

No: 2-080714-151350-0005
Cooler #: 2A
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
1408024-01	P001-S002-0002-01	P001-S002	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S002-0002-01	P001-S002	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S002-0002-01	P001-S002	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S002-0002-01	P001-S002	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408024-02	P001-S003-0002-01	P001-S003	VOCs	Soil	8/7/2014	6	5 gram Encore	0 C	Y
	P001-S003-0002-01	P001-S003	SVOC + PCB	Soil	8/7/2014	2	8 oz	0 C	Y
	P001-S003-0002-01	P001-S003	Percent Moisture	Soil	8/7/2014	2	2 oz	0 C	Y
	P001-S003-0002-01	P001-S003	Metals + Hg	Soil	8/7/2014	2	8 oz	0 C	Y
1408024-03	P001-S003-0002-02	P001-S003	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S003-0002-02	P001-S003	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S003-0002-02	P001-S003	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S003-0002-02	P001-S003	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408024-04	P001-S004-0002-01	P001-S004	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
~~1408024-05~~	~~P001-S005-0002-01~~	~~P001-S005~~	~~VOCs~~	~~Soil~~	~~8/7/2014~~	~~3~~	~~5 gram Encore~~	~~0 C~~	~~N~~
1408024-07	P001-S005-0002-01	P001-S005	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S005-0002-01	P001-S005	Percent Moisture	Soil	8/7/2014	1	2 oz *	0 C	N
1408024-07	P001-S005-0002-01	P001-S005	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408024-04	P001-S006-0002-01	P001-S006	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S006-0002-01	P001-S006	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N

PL.

Special Instructions: RFP 306

*did not receive %moisture 2oz jar for P001-S005-0002-01 where VOA was crossed off rec'd @ 5.2°C (KR) 8/8/14

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL SAMPLES ALL ANALYSES	[signature] (WESTON)	8/7/14	[signature] Joey Does / CompuChem	8/8/14 0904	good condition (KR) 8/8/14

USEPA
DateShipped: 8/7/2014
CarrierName: FedEx
AirbillNo: 7707 8581 7446

CHAIN OF CUSTODY RECORD
Case #: 306
Contact Name: Peter Lisichenko
Contact Phone: 6035124350

No: 2-080714-151350-0005
Cooler #: 2A
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
1408014-01	P001-S006-0002-01	P001-S006	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S006-0002-01	P001-S006	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408019-10	P001-UST01-LW-01	UST01	VOCs	Liquid Waste	8/7/2014	1	4 oz	None	N
	P001-UST01-LW-01	UST01	SVOC+PCB+PEST	Liquid Waste	8/7/2014	1	8 oz	None	N
	P001-UST01-LW-01	UST01	RCRA	Liquid Waste	8/7/2014	1	8 oz	None	N
	P001-UST01-LW-01	UST01	METALS+Hg	Liquid Waste	8/7/2014	1	500 ml	None	N
1408024-05	P001-S001-0002-01	P001-S001	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S001-0002-01	P001-S001	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S001-0002-01	P001-S001	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S001-0002-01	P001-S001	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N

Special Instructions: RFP 306 — recd @ 5.2°C

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL SAMPLES ALL ANALYSIS	(WESTON)	8/7/14	Cindy Dow/CompuChem	8/8/14 0904	good condition @ 8/8/14

OTHER ANALYTES WORK TABLE

PROJECT: Wildroot Building Site
SAMPLING DATE: August 7, 2014
SAMPLE #/CONCENTRATION (ug/Kg)

Semivolatile Organic Compounds (ug/kg)	Matrix	Soil	Soil	Soil	Soil
	Field Sample ID	P001-S001-0002-01	P001-S002-0002-01	P001-S003-0002-01	P001-S003-0002-02*
	Lab Sample ID	1408024-05	1408024-01	1408024-02	1408024-03
	Sample Wt./Vol.	30 g/1000ul	30.2 g/1000ul	30 .1g/1000ul	30.1 g/1000ul
	% Moisture	9	9	4	4
	Dilution Factor	10	10	10	10
	MDL				
Phenol	55	U	U	U	U
bis(2-Chloroethyl)Ether	20	U	U	U	U
2-Chlorophenol	54	U	U	U	U
2-Methylphenol	39	U	U	U	U
2,2-oxybis(1-Chloropropane)	25	U	U	U	U
3+4-Methylphenols[1]	34	U	U	U	U
N-Nitroso-di-n-propylamine	32	U	U	U	U
Acetophenone	44	U	U	U	U
Hexachloroethane	110	U	U	U	U
Nitrobenzene	42	U	U	U	U
Isophorone	29	U	U	U	U
2-Nitrophenol	42	U	U	U	U
2,4-Dimethylphenol	52	U	U	U	U
bis(2-Chloroethoxy)methane	45	U	U	U	U
2,4-Dichlorophenol	40	U	U	U	U
Naphthalene	23	270 J	U	U	U
4-Chloroaniline	28	U	U	U	U
Hexachlorobutadiene	26	U	U	U	U
4-Chloro-3-Methylphenol	24	U	U	U	U
2-Methylnaphthalene	30	U	U	U	U
Hexachlorocyclopentadiene	31	U	U	U	U
2,4,6-Trichlorophenol	31	U	U	U	U
2,4,5-Trichlorophenol	25	U	U	U	U
2-Chloronaphthalene	40	U	U	U	U
2-Nitroaniline	25	U	U	U	U
Dimethylphthalate	16	U	U	U	U
2,6-Dinitrotoluene	18	U	U	U	U
Acenaphthylene	30	U	U	U	U
3-Nitroaniline	22	U	U	U	U
Acenaphthene	30	450 J	U	U	480 J
2,4-Dinitrophenol	16	U	U	U	U
4-Nitrophenol	46	U	U	U	U
2,4-Dinitrotoluene	20	U	U	U	U
Dibenzofuran	30	U	U	U	U
Diethylphthalate	19	U	U	U	U
4-Chlorophenyl-phenylether	21	U	U	U	U
Fluorene	22	480 J	250 J	260 J	510 J
4-Nitroaniline	44	U	U	U	U
4,6-Dinitro-2-methylphenol	45	U	U	U	U
N-Nitrosodiphenylamine[2]	30	U	U	U	U
4-Bromophenyl-phenylether	25	U	U	U	U
Hexachlorobenzene	22	U	U	U	U
Pentachlorophenol	43	U	U	U	U
Phenanthrene	10	5100	2100	3000	4700
Anthracene	8.5	880 J	460 J	600 J	1100 J
Carbazole	17	730 J	270 J	370 J	570 J
Di-n-butylphthalate	25	U	U	U	U

OTHER ANALYTES WORK TABLE

PROJECT: Wildroot Building Site
SAMPLING DATE: August 7, 2014
SAMPLE #/CONCENTRATION (ug/Kg)

Semivolatile Organic Compounds (ug/kg)	Matrix	Soil	Soil	Soil	Soil
	Field Sample ID	P001-S001-0002-01	P001-S002-0002-01	P001-S003-0002-01	P001-S003-0002-02*
	Lab Sample ID	1408024-05	1408024-01	1408024-02	1408024-03
	Sample Wt./Vol.	30 g/1000ul	30.2 g/1000ul	30 .1g/1000ul	30.1 g/1000ul
	% Moisture	9	9	4	4
	Dilution Factor	10	10	10	10
	MDL				
Fluoranthene	25	6900	2600	4800	6100
Pyrene	22	5200	1900	3600	4500
Butylbenzylphthalate	27	1100 J	U	U	U
3,3'-Dichlorobenzidine	35	U	U	U	U
bis(2-Ethylhexyl)phthalate	31	U	U	U	U
Benzo(a)anthracene	27	2700	1100 J	2000	2500
Chrysene	10	3200	1200 J	2200	2700
Di-n-octylphthalate	33	U	U	U	U
Benzo(b)fluoranthene	26	4000	1200 J	2600	3300
Benzo(k)fluoranthene	24	1600 J	600 J	1300 J	1200 J
Benzo(a)pyrene	18	2700	910 J	1900	2300
Indeno(1,2,3-cd)pyrene	29	2000	610 J	1400 J	1600 J
Dibenzo(a,h)anthracene	47	U	U	U	U
Benzo(g,h,i)perylene	30	1800 J	540 J	1200 J	1300 J
Benzaldehyde	27	U	U	U	U
Caprolactam	28	U	U	U	U
Atrazine	20	U	U	U	U
1,1'-Biphenyl	39	U	U	U	U

* A field duplicate of P001-S003-0002-01

Sample Wt./Vol. = Sample weight/volume

MDL - Method Detection Limit

Note: MDL reported on the Form is for the soil matrix have been adjusted to reflect the sample weight/volume, percent moisture and dilution factor.

J - estimate result

[1] - 3 & 4-Methylphenol cannot be seperated for quantitation

[2] - N-nitrosodiphenylamine cannot be seperated from diphenylamine.

OTHER ANALYTES WORK TABLE

PROJECT: Wildroot Building Site
SAMPLING DATE: August 7, 2014
SAMPLE #/CONCENTRATION (ug/Kg)

Semivolatile Organic Compounds (ug/kg)	Matrix	Soil	Soil	Soil
	Field Sample ID	P001-S004-0002-01	P001-S005-0002-01	P001-S006-0002-01
	Lab Sample ID	1408024-06	1408024-07	1408024-04
	Sample Wt./Vol.	30.1 g/1000ul	30.5 g/1000ul	30.3 g/1000ul
	% Moisture	3	13	22
	Dilution Factor	10	1	10
	MDL			
Phenol	55	U	U	U
bis(2-Chloroethyl)Ether	20	U	U	U
2-Chlorophenol	54	U	U	U
2-Methylphenol	39	U	U	U
2,2-oxybis(1-Chloropropane)	25	U	U	U
3+4-Methylphenols[1]	34	U	U	U
N-Nitroso-di-n-propylamine	32	U	U	U
Acetophenone	44	U	U	U
Hexachloroethane	110	U	U	U
Nitrobenzene	42	U	U	U
Isophorone	29	U	U	U
2-Nitrophenol	42	U	U	U
2,4-Dimethylphenol	52	U	U	U
bis(2-Chloroethoxy)methane	45	U	U	U
2,4-Dichlorophenol	40	U	U	U
Naphthalene	23	U	U	U
4-Chloroaniline	28	U	U	U
Hexachlorobutadiene	26	U	U	U
4-Chloro-3-Methylphenol	24	U	U	U
2-Methylnaphthalene	30	U	U	U
Hexachlorocyclopentadiene	31	U	U	U
2,4,6-Trichlorophenol	31	U	U	U
2,4,5-Trichlorophenol	25	U	U	U
2-Chloronaphthalene	40	U	U	U
2-Nitroaniline	25	U	U	U
Dimethylphthalate	16	U	U	U
2,6-Dinitrotoluene	18	U	U	U
Acenaphthylene	30	U	U	U
3-Nitroaniline	22	U	U	U
Acenaphthene	30	U	U	U
2,4-Dinitrophenol	16	U	U	U
4-Nitrophenol	46	U	U	U
2,4-Dinitrotoluene	20	U	U	U
Dibenzofuran	30	U	U	U
Diethylphthalate	19	U	U	U
4-Chlorophenyl-phenylether	21	U	U	U
Fluorene	22	U	U	U
4-Nitroaniline	44	U	U	U
4,6-Dinitro-2-methylphenol	45	U	U	U
N-Nitrosodiphenylamine[2]	30	U	U	U
4-Bromophenyl-phenylether	25	U	U	U
Hexachlorobenzene	22	U	U	U
Pentachlorophenol	43	U	U	U

OTHER ANALYTES WORK TABLE

PROJECT: Wildroot Building Site
SAMPLING DATE: August 7, 2014
SAMPLE #/CONCENTRATION (ug/Kg)

Semivolatile Organic Compounds (ug/kg)	Matrix	Soil		Soil		Soil	
	Field Sample ID	P001-S004-0002-01		P001-S005-0002-01		P001-S006-0002-01	
	Lab Sample ID	1408024-06		1408024-07		1408024-04	
	Sample Wt./Vol.	30.1 g/1000ul		30.5 g/1000ul		30.3 g/1000ul	
	% Moisture	3		13		22	
	Dilution Factor	10		1		10	
	MDL						
Phenanthrene	10	9800	J	14	J	2500	
Anthracene	8.5	1500	J	U		370	J
Carbazole	17	U		U		300	J
Di-n-butylphthalate	25	U		U		U	
Fluoranthene	25	9700	J	36	J	2500	
Pyrene	22	7700	J	29	J	1800	J
Butylbenzylphthalate	27	U		U		U	
3,3'-Dichlorobenzidine	35	U		U		U	
bis(2-Ethylhexyl)phthalate	31	U		U		U	
Benzo(a)anthracene	27	4400	J	U		880	J
Chrysene	10	6700	J	25	J	1000	J
Di-n-octylphthalate	33	U		U		U	
Benzo(b)fluoranthene	26	5400	J	34	J	1100	J
Benzo(k)fluoranthene	24	U		U		520	J
Benzo(a)pyrene	18	3300	J	U		740	J
Indeno(1,2,3-cd)pyrene	29	U		U		450	J
Dibenzo(a,h)anthracene	47	U		U		U	
Benzo(g,h,i)perylene	30	U		57	J	440	J
Benzaldehyde	27	U		U		U	
Caprolactam	28	U		U		U	
Atrazine	20	U		U		U	
1,1'-Biphenyl	39	U		U		U	

Sample Wt./Vol. = Sample weight/volume

MDL - Method Detection Limit

Note: MDL reported on the Form Is for the soil matrix have been adjusted to reflect the sample weight/volume, percent moisture and dilution factor.

J - estimate result

[1] - 3 & 4-Methylphenol cannot be seperated for quantitation

[2] - N-nitrosodiphenylamine cannot be seperated from diphenylamine.

ANALYSES DATA PACKAGE COVER PAGE

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Laboratory: COMPUCHEM

SDG: 1408024

Client Sample Id:	Analysis:	Lab Sample Id:
P001-S002-0002-01	SW8270D	1408024-01
P001-S003-0002-01	SW8270D	1408024-02
P001-S003-0002-02	SW8270D	1408024-03
P001-S006-0002-01	SW8270D	1408024-04
P001-S001-0002-01	SW8270D	1408024-05
P001-S004-0002-01	SW8270D	1408024-06
P001-S005-0002-01	SW8270D	1408024-07

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions addressed in the narrative. Release of the data contained in this hardcopy data package and in the Electronic Data Deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Quentisha Forrester Name: Quentisha Forrester

Date: 08/20/2014 Title: Chemist III

CompuChem
A Division Of
Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH
nelac

501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050

CompuChem

A division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE
SDG # 1408024
PROTOCOL: SW-846

SAMPLE IDENTIFICATIONS: **P001-S002-0002-01** **P001-S003-0002-01** **P001-S003-0002-02** **P001-S006-0002-01** **P001-S001-0002-01** **P001-S004-0002-01** **P001-S005-0002-01**

The 7 soil samples listed above were received intact, properly refrigerated at 5.2°C, with proper documentation, in sealed shipping containers, on August 8, 2014. The samples were scheduled for the requested analyses of the semivolatile fraction. SW-846, 3rd Edition, Update 4, Sonication extraction (Method 3550B/C), and Method 8270D were used to prepare and analyze these samples, with the exceptions and/or additions requested by the client. This portion of the narrative deals with the semivolatile fraction only.

Semivolatile

Extraction and analysis holding time requirements were met for these samples. The percent moisture values ranged from 3 to 13 percent.

There were Semivolatile Project/Target Compound List (TCL) analytes identified above the Contract Required Quantitation Limit (CRQL) in these samples. Samples P001-S002-0002-01, P001-S003-0002-01, P001-S003-0002-02, P001-S006-0002-01, P001-S001-0002-01 and P001-S004-0002-01 were initially run at a dilution due to sample matrix.

Manual integrations were performed in this SDG, as indicated on the spreadsheet in section S. The reasons have been explained in the notice included in the narrative section of the SDG.

All decafluorotriphenylphosphine (DFTPP) abundance criteria were met for tunes associated to this SDG.
All QC criteria were met for all initial, second source and continuing calibration standards associated to this SDG.

All of the surrogates met recovery and retention time criteria in the analyses of these samples with the following exceptions. The surrogates were diluted out in the analysis of sample P001-S004-0002-01.
All of the internal standards met response and retention time criteria in the analyses of these samples.

The associated method blanks met all quality control criteria.

P001-S003-0002-01 was used as the original to prepare the duplicate matrix spikes as requested. The associated duplicate matrix spikes did not meet most of the advisory accuracy and precision criteria due to a dilution. The associated Laboratory Control Sample (LCS) prepared and analyzed along with the sample met recovery and precision criteria.

An uncertainty of these test results may be estimated from the recovery of the surrogates added to the sample prior to sample preparation or from the recovery of spiked compound(s) in the associated laboratory control sample. Further information is available upon request.

I certify that the tests used in this report meet all requirements of the NELAC standards unless otherwise stated in the SDG narrative or QA notice. I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on CD has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Quentisha Forrester
Chemist III
August 20, 2014
October 3, 2014 Revision

CompuChem

A division of Liberty Analytical Corporation

Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC/HPLC chemists. An Extracted Ion Current Profile (EICP) or a GC/HPLC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC/HPLC analysis. The manual editing/integration flags are:

M - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak. The most common reasons for performing manual integrations/editing are: the compound was not found by the automatic integration routine, the compound was incorrectly integrated by the automatic integration routine, and the co-eluting compounds were incorrectly integrated by the automatic integration routine.

H - Denotes that the data reviewer, GC/MS operator, or GC/HPLC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

MH - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

L - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

ML - Denotes that an alternate GC/MS library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

These codes will appear in the GC/MS and GC/HPLC raw data.

Revision 8 (01/29/2011)

ORGANIC DATA REPORTING QUALIFIERS

On the appropriate reporting form, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on the appropriate reporting form for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1:1 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide and/or Aroclor or other GC or HPLC identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search and must be used with the J flag. For generic characterization of a TIC such as "chlorinated hydrocarbon" (or for an "unknown," with no matches ≥ 85%), the N flag is not used.

P : In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the Form I and flagged with a P.
For SW-846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the lower of the two values is reported and flagged with a P on the reporting form. When the RPD is equal to or less than 40%, our policy is to also report the lower of the two values, although the choice could be a project specific issue. These SW-846 policies are consistent with Method 8000C. If Method 8000B is required, the higher of the two values is reported. For certain HPLC analyses, if one of the HPLC columns displays co-elution of target analytes, all results are reported from a primary column displaying no co-elution. Results are still flagged with a P if the RPD between columns is greater than 40%.

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

DATA REPORTING QUALIFIERS (continued)

B: This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E: This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a concentration greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a concentration greater than the upper level of the calibration range will have the result flagged with an E on the appropriate reporting form for the original analysis.

D: If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on the appropriate reporting form for the more diluted sample, and **all** reported concentrations on that form are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate reporting forms are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses <u>are not combined</u> on a single reporting form.

A: This flag indicates that a TIC is a suspected aldol-condensation product.

S: In the SOM01.2 SOW document, this flag is used to indicate an estimated value for Aroclor target compounds where a valid 5-point initial calibration was not performed prior to the analytes detection in a sample. If an "S" flag is used for a specific Aroclor, then a reanalysis of the sample is required after a valid 5-point calibration is performed for the detected Aroclor. The "S" flag is not utilized for non CLP analyses.

* This flag is applied to a target analyte when any QC acceptance criterion has not been met for that analyte. The flag appears on the reporting form of the associated QC analysis.

X/Y/Z: Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y, and Z.

ANALYSIS DATA SHEET

SW8270D

P001-S001-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550C MOD_SV File ID: 1408024-05D62.d Sampled: 08/07/14 00:00

Initial/Final: 30g / 1000uL Sulfur Cleanup: N Lab ID: 1408024-05 Received: 08/08/14 09:04

Dilution: 10 pH: Florisil Cleanup: N Prepared: 08/12/14 09:00

% Moisture: 9 GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/15/14 23:41

Batch: 4080818 Sequence: 4H15001 Calibration: 4072701 Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		600	3600	U
111-44-4	Bis(2-chloroethyl)ether		220	1900	U
95-57-8	2-Chlorophenol		590	3600	U
95-48-7	2-Methylphenol		420	3600	U
108-60-1	2,2'-oxybis(1-Chloropropane)		270	1900	U
106-44-5	3 & 4-Methylphenol		370	3600	U
621-64-7	N-Nitroso-di-N-propylamine		350	1900	U
98-86-2	Acetophenone		480	1900	U
67-72-1	Hexachloroethane		1200	1900	U
98-95-3	Nitrobenzene		450	1900	U
78-59-1	Isophorone		320	1900	U
88-75-5	2-Nitrophenol		450	3600	U
105-67-9	2,4-Dimethylphenol		570	3600	U
111-91-1	Bis(2-chloroethoxy)methane		490	1900	U
120-83-2	2,4-Dichlorophenol		430	3600	U
91-20-3	Naphthalene	270	250	1900	JP
106-47-8	4-Chloroaniline		310	3600	U
87-68-3	Hexachlorobutadiene		290	1900	U
59-50-7	4-Chloro-3-methylphenol		270	3600	U
91-57-6	2-Methylnaphthalene		330	1900	U
77-47-4	Hexachlorocyclopentadiene		340	1900	U
88-06-2	2,4,6-Trichlorophenol		330	3600	U
95-95-4	2,4,5-Trichlorophenol		270	3600	U
91-58-7	2-Chloronaphthalene		440	1900	U
88-74-4	2-Nitroaniline		270	3600	U
131-11-3	Dimethylphthalate		170	1900	U
606-20-2	2,6-Dinitrotoluene		190	1900	U
208-96-8	Acenaphthylene		320	1900	U
99-09-2	3-Nitroaniline		240	3600	U
83-32-9	Acenaphthene	450	330	1900	JP
51-28-5	2,4-Dinitrophenol		170	3600	U
100-02-7	4-Nitrophenol		500	3600	U
121-14-2	2,4-Dinitrotoluene		220	1900	U
132-64-9	Dibenzofuran		330	1900	U
84-66-2	Diethylphthalate		200	1900	U

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S001-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-05D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-05 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 9 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 23:41

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		230	1900	U
86-73-7	Fluorene	480	240	1900	JD
100-01-6	4-Nitroaniline		480	3600	U
534-52-1	4,6-Dinitro-2-methylphenol		490	3600	U
86-30-6	N-Nitrosodiphenylamine (1)		320	1900	U
101-55-3	4-Bromophenyl-phenylether		280	1900	U
118-74-1	Hexachlorobenzene		240	1900	U
87-86-5	Pentachlorophenol		470	3600	U
85-01-8	Phenanthrene	5100	110	1900	D
120-12-7	Anthracene	880	93	1900	JD
86-74-8	Carbazole	730	190	1900	JD
84-74-2	Di-n-butylphthalate		270	1900	U
206-44-0	Fluoranthene	6900	270	1900	D
129-00-0	Pyrene	5200	240	1900	D
85-68-7	Butylbenzylphthalate	1100	290	1900	JD
91-94-1	3,3'-Dichlorobenzidine		380	1900	U
117-81-7	bis(2-ethylhexyl)Phthalate		330	1900	U
56-55-3	Benzo (a) anthracene	2700	300	1900	D
218-01-9	Chrysene	3200	110	1900	D
117-84-0	Di-n-octylphthalate		360	1900	U
205-99-2	Benzo (b) fluoranthene	4000	280	1900	D
207-08-9	Benzo(k)fluoranthene	1600	260	1900	JD
50-32-8	Benzo (a) pyrene	2700	200	1900	D
193-39-5	Indeno(1,2,3-cd)pyrene	2000	310	1900	D
53-70-3	Dibenzo(a,h)anthracene		510	1900	U
191-24-2	Benzo (g,h,i) perylene	1800	320	1900	JD
100-52-7	Benzaldehyde		290	1900	U
105-60-2	Caprolactam		310	1900	U
1912-24-9	Atrazine		220	1900	U
92-52-4	1,1'-Biphenyl		430	1900	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3645	2511	69	35 - 105	D
Phenol-d5	3645	2121	58	40 - 100	D
Nitrobenzene-d5	1823	ND		35 - 100	D

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S001-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-05D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-05 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 9 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 23:41

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	1823	ND		45 - 105	D
2,4,6-Tribromophenol	3645	2553	70	35 - 125	D
Terphenyl-d14	1823	ND		30 - 125	D

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
000192-65-4	1,2:4,5-Dibenzopyrene	880	412809	27.765	90	JDN
000243-17-4	11H-Benzo[b]fluorene	770	448767	21.133	91	JDN
000084-65-1	9,10-Anthracenedione	980	375308	19.587	97	JDN
000192-97-2	Benzo[e]pyrene	1400	660125	24.234	97	JDN
000205-82-3	Benzo[j]fluoranthene	3000	1396798	24.459	96	JDN
791-28-6	Triphenylphosphine oxide	2000	1191295	22.791	91	JDN
NA	Unk. Alkane	2000	947037	25.452	0	JD
NA	Unknown 19.219	780	297619	19.219	0	JD
NA	Unknown 2.453	1300	337874	2.453	0	JD
NA	Unknown 20.457	750	440244	20.457	0	JD
NA	Unknown 22.668	780	455994	22.668	0	JD
NA	Unknown 24.367	1100	528768	24.367	0	JD
NA	Unknown 24.848	2100	998753	24.848	0	JD
NA	Unknown 26.097	770	361115	26.097	0	JD
NA	Unknown 26.506	1100	500022	26.506	0	JD
NA	Unknown 4.173	12000	3172435	4.173	0	JD

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.

(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.

(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S002-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-01D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.2g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-01 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 9 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 21:42

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		600	3600	U
111-44-4	Bis(2-chloroethyl)ether		220	1900	U
95-57-8	2-Chlorophenol		590	3600	U
95-48-7	2-Methylphenol		420	3600	U
108-60-1	2,2'-oxybis(1-Chloropropane)		270	1900	U
106-44-5	3 & 4-Methylphenol		370	3600	U
621-64-7	N-Nitroso-di-N-propylamine		350	1900	U
98-86-2	Acetophenone		480	1900	U
67-72-1	Hexachloroethane		1200	1900	U
98-95-3	Nitrobenzene		460	1900	U
78-59-1	Isophorone		320	1900	U
88-75-5	2-Nitrophenol		450	3600	U
105-67-9	2,4-Dimethylphenol		570	3600	U
111-91-1	Bis(2-chloroethoxy)methane		490	1900	U
120-83-2	2,4-Dichlorophenol		430	3600	U
91-20-3	Naphthalene		250	1900	U
106-47-8	4-Chloroaniline		310	3600	U
87-68-3	Hexachlorobutadiene		290	1900	U
59-50-7	4-Chloro-3-methylphenol		270	3600	U
91-57-6	2-Methylnaphthalene		330	1900	U
77-47-4	Hexachlorocyclopentadiene		340	1900	U
88-06-2	2,4,6-Trichlorophenol		340	3600	U
95-95-4	2,4,5-Trichlorophenol		270	3600	U
91-58-7	2-Chloronaphthalene		440	1900	U
88-74-4	2-Nitroaniline		270	3600	U
131-11-3	Dimethylphthalate		180	1900	U
606-20-2	2,6-Dinitrotoluene		190	1900	U
208-96-8	Acenaphthylene		320	1900	U
99-09-2	3-Nitroaniline		240	3600	U
83-32-9	Acenaphthene		330	1900	U
51-28-5	2,4-Dinitrophenol		170	3600	U
100-02-7	4-Nitrophenol		500	3600	U
121-14-2	2,4-Dinitrotoluene		220	1900	U
132-64-9	Dibenzofuran		330	1900	U
84-66-2	Diethylphthalate		200	1900	U

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S002-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-01D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.2g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-01 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 9 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 21:42

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		230	1900	U
86-73-7	Fluorene	250	240	1900	JD
100-01-6	4-Nitroaniline		490	3600	U
534-52-1	4,6-Dinitro-2-methylphenol		490	3600	U
86-30-6	N-Nitrosodiphenylamine (1)		330	1900	U
101-55-3	4-Bromophenyl-phenylether		280	1900	U
118-74-1	Hexachlorobenzene		240	1900	U
87-86-5	Pentachlorophenol		470	3600	U
85-01-8	Phenanthrene	2100	110	1900	D
120-12-7	Anthracene	460	93	1900	JD
86-74-8	Carbazole	270	190	1900	JD
84-74-2	Di-n-butylphthalate		270	1900	U
206-44-0	Fluoranthene	2600	270	1900	D
129-00-0	Pyrene	1900	240	1900	D
85-68-7	Butylbenzylphthalate		290	1900	U
91-94-1	3,3'-Dichlorobenzidine		380	1900	U
117-81-7	bis(2-ethylhexyl)Phthalate		340	1900	U
56-55-3	Benzo (a) anthracene	1100	300	1900	JD
218-01-9	Chrysene	1200	110	1900	JD
117-84-0	Di-n-octylphthalate		360	1900	U
205-99-2	Benzo (b) fluoranthene	1200	280	1900	JD
207-08-9	Benzo(k)fluoranthene	600	260	1900	JD
50-32-8	Benzo (a) pyrene	910	200	1900	JD
193-39-5	Indeno(1,2,3-cd)pyrene	610	320	1900	JD
53-70-3	Dibenzo(a,h)anthracene		510	1900	U
191-24-2	Benzo (g,h,i) perylene	540	330	1900	JD
100-52-7	Benzaldehyde		290	1900	U
105-60-2	Caprolactam		310	1900	U
1912-24-9	Atrazine		220	1900	U
92-52-4	1,1'-Biphenyl		430	1900	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3650	2440	67	35 - 105	D
Phenol-d5	3650	1978	54	40 - 100	D
Nitrobenzene-d5	1825	ND		35 - 100	D

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S002-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550C MOD_SV File ID: 1408024-01D62.d Sampled: 08/07/14 00:00

Initial/Final: 30.2g / 1000uL Sulfur Cleanup: N Lab ID: 1408024-01 Received: 08/08/14 09:04

Dilution: 10 pH: Florisil Cleanup: N Prepared: 08/12/14 09:00

% Moisture: 9 GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/15/14 21:42

Batch: 4080818 Sequence: 4H15001 Calibration: 4072701 Instrument: 5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	1825	ND		45 - 105	D
2.4.6-Tribromophenol	3650	2241	61	35 - 125	D
Terphenyl-d14	1825	ND		30 - 125	D

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
000083-46-5	.beta.-Sitosterol	1900	948085	26.49	99	JDN
000192-97-2	Benzo[e]pyrene	990	480753	24.514	98	JDN
001058-61-3	Stigmast-4-en-3-one	940	460704	27.175	97	JDN
791-28-6	Triphenylphosphine oxide	2600	1233868	22.785	93	JDN
NA	Unk. Alkane	1200	571145	25.456	0	JD
NA	Unknown 2.457	1400	379081	2.457	0	JD
NA	Unknown 25.610	1400	662008	25.61	0	JD
NA	Unknown 25.794	1400	680886	25.794	0	JD
NA	Unknown 3.204	800	222624	3.204	0	JD
NA	Unknown 4.167	12000	3226155	4.167	0	JD

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.

(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.

(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S003-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550C MOD_SV File ID: 1408024-02D62.d Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 1000uL Sulfur Cleanup: N Lab ID: 1408024-02 Received: 08/08/14 09:04

Dilution: 10 pH: Florisil Cleanup: N Prepared: 08/12/14 09:00

% Moisture: 4 GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/15/14 19:43

Batch: 4080818 Sequence: 4H15001 Calibration: 4072701 Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		570	3400	U
111-44-4	Bis(2-chloroethyl)ether		200	1800	U
95-57-8	2-Chlorophenol		560	3400	U
95-48-7	2-Methylphenol		400	3400	U
108-60-1	2,2'-oxybis(1-Chloropropane)		260	1800	U
106-44-5	3 & 4-Methylphenol		350	3400	U
621-64-7	N-Nitroso-di-N-propylamine		330	1800	U
98-86-2	Acetophenone		460	1800	U
67-72-1	Hexachloroethane		1100	1800	U
98-95-3	Nitrobenzene		430	1800	U
78-59-1	Isophorone		300	1800	U
88-75-5	2-Nitrophenol		430	3400	U
105-67-9	2,4-Dimethylphenol		540	3400	U
111-91-1	Bis(2-chloroethoxy)methane		470	1800	U
120-83-2	2,4-Dichlorophenol		410	3400	U
91-20-3	Naphthalene		240	1800	U
106-47-8	4-Chloroaniline		290	3400	U
87-68-3	Hexachlorobutadiene		270	1800	U
59-50-7	4-Chloro-3-methylphenol		250	3400	U
91-57-6	2-Methylnaphthalene		310	1800	U
77-47-4	Hexachlorocyclopentadiene		320	1800	U
88-06-2	2,4,6-Trichlorophenol		320	3400	U
95-95-4	2,4,5-Trichlorophenol		260	3400	U
91-58-7	2-Chloronaphthalene		420	1800	U
88-74-4	2-Nitroaniline		260	3400	U
131-11-3	Dimethylphthalate		170	1800	U
606-20-2	2,6-Dinitrotoluene		180	1800	U
208-96-8	Acenaphthylene		310	1800	U
99-09-2	3-Nitroaniline		230	3400	U
83-32-9	Acenaphthene		310	1800	U
51-28-5	2,4-Dinitrophenol		160	3400	U
100-02-7	4-Nitrophenol		480	3400	U
121-14-2	2,4-Dinitrotoluene		210	1800	U
132-64-9	Dibenzofuran		310	1800	U
84-66-2	Diethylphthalate		190	1800	U

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S003-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550C MOD_SV File ID: 1408024-02D62.d Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 1000uL Sulfur Cleanup: N Lab ID: 1408024-02 Received: 08/08/14 09:04

Dilution: 10 pH: Florisil Cleanup: N Prepared: 08/12/14 09:00

% Moisture: 4 GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/15/14 19:43

Batch: 4080818 Sequence: 4H15001 Calibration: 4072701 Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		220	1800	U
86-73-7	Fluorene	260	230	1800	JD
100-01-6	4-Nitroaniline		460	3400	U
534-52-1	4,6-Dinitro-2-methylphenol		470	3400	U
86-30-6	N-Nitrosodiphenylamine (1)		310	1800	U
101-55-3	4-Bromophenyl-phenylether		260	1800	U
118-74-1	Hexachlorobenzene		230	1800	U
87-86-5	Pentachlorophenol		450	3400	U
85-01-8	Phenanthrene	3000	100	1800	D
120-12-7	Anthracene	600	88	1800	JD
86-74-8	Carbazole	370	180	1800	JD
84-74-2	Di-n-butylphthalate		250	1800	U
206-44-0	Fluoranthene	4800	250	1800	D
129-00-0	Pyrene	3600	230	1800	D
85-68-7	Butylbenzylphthalate		280	1800	U
91-94-1	3,3'-Dichlorobenzidine		360	1800	U
117-81-7	bis(2-ethylhexyl)Phthalate		320	1800	U
56-55-3	Benzo (a) anthracene	2000	280	1800	D
218-01-9	Chrysene	2200	110	1800	D
117-84-0	Di-n-octylphthalate		340	1800	U
205-99-2	Benzo (b) fluoranthene	2600	270	1800	D
207-08-9	Benzo(k)fluoranthene	1300	250	1800	JD
50-32-8	Benzo (a) pyrene	1900	190	1800	D
193-39-5	Indeno(1,2,3-cd)pyrene	1400	300	1800	JD
53-70-3	Dibenzo(a,h)anthracene		480	1800	U
191-24-2	Benzo (g,h,i) perylene	1200	310	1800	JD
100-52-7	Benzaldehyde		280	1800	U
105-60-2	Caprolactam		290	1800	U
1912-24-9	Atrazine		200	1800	U
92-52-4	1,1'-Biphenyl		410	1800	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3453	2594	75	35 - 105	D
Phenol-d5	3453	2195	64	40 - 100	D
Nitrobenzene-d5	1726	ND		35 - 100	D

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S003-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550C MOD_SV File ID: 1408024-02D62.d Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 1000uL Sulfur Cleanup: N Lab ID: 1408024-02 Received: 08/08/14 09:04

Dilution: 10 pH: Florisil Cleanup: N Prepared: 08/12/14 09:00

% Moisture: 4 GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/15/14 19:43

Batch: 4080818 Sequence: 4H15001 Calibration: 4072701 Instrument: 5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	1726	ND		45 - 105	D
2.4.6-Tribromophenol	3453	2507	73	35 - 125	D
Terphenyl-d14	1726	ND		30 - 125	D

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
000213-46-7	1,2:7,8-Dibenzophenanthrene	710	308226	26.06	86	JDN
2425-85-6	2-Naphthalenol, 1-[(4-methyl-2-nitrophen	900	393487	25.61	94	JDN
1985-5-0	Perylene	1800	769210	24.454	93	JDN
NA	Unknown 2.458	1400	418056	2.458	0	JD
NA	Unknown 22.785	2100	1254151	22.785	0	JD
NA	Unknown 26.091	690	301615	26.091	0	JD
NA	Unknown 27.780	1200	517859	27.78	0	JD
NA	Unknown 3.195	940	272734	3.195	0	JD
NA	Unknown 3.932	800	230404	3.932	0	JD
NA	Unknown 4.167	13000	3827138	4.167	0	JD

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.

(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.

(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S003-0002-02

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550C MOD_SV File ID: 1408024-03D62.d Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 1000uL Sulfur Cleanup: N Lab ID: 1408024-03 Received: 08/08/14 09:04

Dilution: 10 pH: Florisil Cleanup: N Prepared: 08/12/14 09:00

% Moisture: 4 GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/15/14 22:22

Batch: 4080818 Sequence: 4H15001 Calibration: 4072701 Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		570	3400	U
111-44-4	Bis(2-chloroethyl)ether		200	1800	U
95-57-8	2-Chlorophenol		560	3400	U
95-48-7	2-Methylphenol		400	3400	U
108-60-1	2,2'-oxybis(1-Chloropropane)		260	1800	U
106-44-5	3 & 4-Methylphenol		350	3400	U
621-64-7	N-Nitroso-di-N-propylamine		330	1800	U
98-86-2	Acetophenone		460	1800	U
67-72-1	Hexachloroethane		1100	1800	U
98-95-3	Nitrobenzene		430	1800	U
78-59-1	Isophorone		300	1800	U
88-75-5	2-Nitrophenol		430	3400	U
105-67-9	2,4-Dimethylphenol		540	3400	U
111-91-1	Bis(2-chloroethoxy)methane		470	1800	U
120-83-2	2,4-Dichlorophenol		410	3400	U
91-20-3	Naphthalene		240	1800	U
106-47-8	4-Chloroaniline		290	3400	U
87-68-3	Hexachlorobutadiene		270	1800	U
59-50-7	4-Chloro-3-methylphenol		250	3400	U
91-57-6	2-Methylnaphthalene		310	1800	U
77-47-4	Hexachlorocyclopentadiene		320	1800	U
88-06-2	2,4,6-Trichlorophenol		320	3400	U
95-95-4	2,4,5-Trichlorophenol		260	3400	U
91-58-7	2-Chloronaphthalene		420	1800	U
88-74-4	2-Nitroaniline		260	3400	U
131-11-3	Dimethylphthalate		170	1800	U
606-20-2	2,6-Dinitrotoluene		180	1800	U
208-96-8	Acenaphthylene		310	1800	U
99-09-2	3-Nitroaniline		230	3400	U
83-32-9	Acenaphthene	480	310	1800	J
51-28-5	2,4-Dinitrophenol		160	3400	U
100-02-7	4-Nitrophenol		480	3400	U
121-14-2	2,4-Dinitrotoluene		210	1800	U
132-64-9	Dibenzofuran		310	1800	U
84-66-2	Diethylphthalate		190	1800	U

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S003-0002-02

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-03D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-03 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 4 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 22:22

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		220	1800	U
86-73-7	Fluorene	510	230	1800	J
100-01-6	4-Nitroaniline		460	3400	U
534-52-1	4,6-Dinitro-2-methylphenol		470	3400	U
86-30-6	N-Nitrosodiphenylamine (1)		310	1800	U
101-55-3	4-Bromophenyl-phenylether		260	1800	U
118-74-1	Hexachlorobenzene		230	1800	U
87-86-5	Pentachlorophenol		450	3400	U
85-01-8	Phenanthrene	4700	100	1800	D
120-12-7	Anthracene	1100	88	1800	J
86-74-8	Carbazole	570	180	1800	J
84-74-2	Di-n-butylphthalate		250	1800	U
206-44-0	Fluoranthene	6100	250	1800	D
129-00-0	Pyrene	4500	230	1800	D
85-68-7	Butylbenzylphthalate		280	1800	U
91-94-1	3,3'-Dichlorobenzidine		360	1800	U
117-81-7	bis(2-ethylhexyl)Phthalate		320	1800	U
56-55-3	Benzo (a) anthracene	2500	280	1800	D
218-01-9	Chrysene	2700	110	1800	D
117-84-0	Di-n-octylphthalate		340	1800	U
205-99-2	Benzo (b) fluoranthene	3300	270	1800	D
207-08-9	Benzo(k)fluoranthene	1200	250	1800	J
50-32-8	Benzo (a) pyrene	2300	190	1800	D
193-39-5	Indeno(1,2,3-cd)pyrene	1600	300	1800	J
53-70-3	Dibenzo(a,h)anthracene		490	1800	U
191-24-2	Benzo (g,h,i) perylene	1300	310	1800	J
100-52-7	Benzaldehyde		280	1800	U
105-60-2	Caprolactam		290	1800	U
1912-24-9	Atrazine		200	1800	U
92-52-4	1,1'-Biphenyl		410	1800	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3455	2310	67	35 - 105	D
Phenol-d5	3455	1984	57	40 - 100	D
Nitrobenzene-d5	1728	ND		35 - 100	D

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S003-0002-02

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-03D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-03 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 4 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 22:22

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	1728	ND		45 - 105	D
2,4,6-Tribromophenol	3455	2190	63	35 - 125	D
Terphenyl-d14	1728	ND		30 - 125	D

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
000213-46-7	1,2:7,8-Dibenzophenanthrene	950	264201	26.056	86	JDN
000203-64-5	4H-Cyclopenta[def]phenanthrene	750	194277	19.218	87	JDN
000205-99-2	Benz[e]acephenanthrylene	1900	514806	24.449	95	JDN
000191-26-4	Dibenzo[def,mno]chrysene	1100	300593	26.373	92	JDN
791-28-6	Triphenylphosphine oxide	3000	1163249	22.78	93	JDN
NA	Unk. Alkane	740	205073	25.452	0	JD
NA	Unknown 2.453	1200	195386	2.453	0	JD
NA	Unknown 24.848	750	207937	24.848	0	JD
NA	Unknown 25.789	1300	346931	25.789	0	JD
NA	Unknown 3.200	850	138116	3.2	0	JD
NA	Unknown 4.173	11000	1862016	4.173	0	JD

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.

(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.

(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S004-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550C MOD_SV File ID: 1408024-06D62.d Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 15000uL Sulfur Cleanup: N Lab ID: 1408024-06 Received: 08/08/14 09:04

Dilution: 10 pH: Florisil Cleanup: N Prepared: 08/12/14 09:00

% Moisture: 3 GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/16/14 00:21

Batch: 4080818 Sequence: 4H15001 Calibration: 4072701 Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		8500	51000	U
111-44-4	Bis(2-chloroethyl)ether		3000	26000	U
95-57-8	2-Chlorophenol		8300	51000	U
95-48-7	2-Methylphenol		5900	51000	U
108-60-1	2,2'-oxybis(1-Chloropropane)		3900	26000	U
106-44-5	3 & 4-Methylphenol		5200	51000	U
621-64-7	N-Nitroso-di-N-propylamine		4900	26000	U
98-86-2	Acetophenone		6800	26000	U
67-72-1	Hexachloroethane		17000	26000	U
98-95-3	Nitrobenzene		6400	26000	U
78-59-1	Isophorone		4500	26000	U
88-75-5	2-Nitrophenol		6400	51000	U
105-67-9	2,4-Dimethylphenol		8000	51000	U
111-91-1	Bis(2-chloroethoxy)methane		6900	26000	U
120-83-2	2,4-Dichlorophenol		6100	51000	U
91-20-3	Naphthalene		3600	26000	U
106-47-8	4-Chloroaniline		4300	51000	U
87-68-3	Hexachlorobutadiene		4100	26000	U
59-50-7	4-Chloro-3-methylphenol		3700	51000	U
91-57-6	2-Methylnaphthalene		4600	26000	U
77-47-4	Hexachlorocyclopentadiene		4800	26000	U
88-06-2	2,4,6-Trichlorophenol		4700	51000	U
95-95-4	2,4,5-Trichlorophenol		3800	51000	U
91-58-7	2-Chloronaphthalene		6200	26000	U
88-74-4	2-Nitroaniline		3800	51000	U
131-11-3	Dimethylphthalate		2500	26000	U
606-20-2	2,6-Dinitrotoluene		2700	26000	U
208-96-8	Acenaphthylene		4600	26000	U
99-09-2	3-Nitroaniline		3400	51000	U
83-32-9	Acenaphthene		4600	26000	U
51-28-5	2,4-Dinitrophenol		2400	51000	U
100-02-7	4-Nitrophenol		7100	51000	U
121-14-2	2,4-Dinitrotoluene		3100	26000	U
132-64-9	Dibenzofuran		4700	26000	U
84-66-2	Diethylphthalate		2900	26000	U

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S004-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-06D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 15000uL | Sulfur Cleanup: N | Lab ID: 1408024-06 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 3 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/16/14 00:21

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		3300	26000	U
86-73-7	Fluorene		3400	26000	U
100-01-6	4-Nitroaniline		6800	51000	U
534-52-1	4,6-Dinitro-2-methylphenol		6900	51000	U
86-30-6	N-Nitrosodiphenylamine (1)		4600	26000	U
101-55-3	4-Bromophenyl-phenylether		3900	26000	U
118-74-1	Hexachlorobenzene		3400	26000	U
87-86-5	Pentachlorophenol		6700	51000	U
85-01-8	Phenanthrene	9800	1500	26000	JD
120-12-7	Anthracene	1500	1300	26000	JD
86-74-8	Carbazole		2700	26000	U
84-74-2	Di-n-butylphthalate		3800	26000	U
206-44-0	Fluoranthene	9700	3800	26000	JD
129-00-0	Pyrene	7700	3400	26000	JD
85-68-7	Butylbenzylphthalate		4100	26000	U
91-94-1	3,3'-Dichlorobenzidine		5300	26000	U
117-81-7	bis(2-ethylhexyl)Phthalate		4700	26000	U
56-55-3	Benzo (a) anthracene	4400	4200	26000	JD
218-01-9	Chrysene	6700	1600	26000	JD
117-84-0	Di-n-octylphthalate		5100	26000	U
205-99-2	Benzo (b) fluoranthene	5400	4000	26000	JD
207-08-9	Benzo(k)fluoranthene		3700	26000	U
50-32-8	Benzo (a) pyrene	3300	2800	26000	JD
193-39-5	Indeno(1,2,3-cd)pyrene		4400	26000	U
53-70-3	Dibenzo(a,h)anthracene		7200	26000	U
191-24-2	Benzo (g,h,i) perylene		4600	26000	U
100-52-7	Benzaldehyde		4100	26000	U
105-60-2	Caprolactam		4300	26000	U
1912-24-9	Atrazine		3000	26000	U
92-52-4	1,1'-Biphenyl		6100	26000	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3424	ND		35 - 105	D
Phenol-d5	3424	ND		40 - 100	D
Nitrobenzene-d5	1712	ND		35 - 100	D

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S004-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-06D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 15000uL | Sulfur Cleanup: N | Lab ID: 1408024-06 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 3 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/16/14 00:21

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	1712	ND		45 - 105	D
2,4,6-Tribromophenol	3424	ND		35 - 125	D
Terphenyl-d14	1712	ND		30 - 125	D

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
000057-10-3	n-Hexadecanoic acid	540000	14108970	19.495	97	JDN
000057-11-4	Octadecanoic acid	120000	10247370	20.774	99	JDN
791-28-6	Triphenylphosphine oxide	74000	6501472	22.791	97	JDN
NA	Unk. Alkane	68000	5898530	21.204	0	JD
NA	Unk. Alkane(1)	86000	7465379	21.645	0	JD
NA	Unk. Alkane(10)	140000	12649880	23.436	0	JD
NA	Unk. Alkane(11)	43000	11033290	23.671	0	JD
NA	Unk. Alkane(12)	70000	17924230	23.814	0	JD
NA	Unk. Alkane(13)	84000	21641410	23.947	0	JD
NA	Unk. Alkane(14)	77000	19742090	24.285	0	JD
NA	Unk. Alkane(15)	75000	19319580	24.736	0	JD
NA	Unk. Alkane(16)	81000	20752660	24.879	0	JD
NA	Unk. Alkane(17)	41000	10498090	25.165	0	JD
NA	Unk. Alkane(18)	67000	17317330	25.339	0	JD
NA	Unk. Alkane(19)	59000	15068890	26.005	0	JD
NA	Unk. Alkane(2)	64000	5578523	22.126	0	JD
NA	Unk. Alkane(3)	66000	5783962	22.238	0	JD
NA	Unk. Alkane(4)	120000	10596850	22.32	0	JD
NA	Unk. Alkane(5)	110000	9886893	22.627	0	JD
NA	Unk. Alkane(6)	86000	7549384	22.832	0	JD
NA	Unk. Alkane(7)	90000	7835200	22.914	0	JD
NA	Unk. Alkane(8)	110000	9919993	23.159	0	JD
NA	Unk. Alkane(9)	190000	16500400	23.333	0	JD
NA	Unknown 25.759	65000	16618630	25.759	0	JD

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.

(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.

(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S005-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-0762.d | Sampled: 08/07/14 00:00

Initial/Final: 30.5g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-07 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 13 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 18:24

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		62	370	U
111-44-4	Bis(2-chloroethyl)ether		22	190	U
95-57-8	2-Chlorophenol		61	370	U
95-48-7	2-Methylphenol		44	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)		28	190	U
106-44-5	3 & 4-Methylphenol		38	370	U
621-64-7	N-Nitroso-di-N-propylamine		36	190	U
98-86-2	Acetophenone		50	190	U
67-72-1	Hexachloroethane		120	190	U
98-95-3	Nitrobenzene		47	190	U
78-59-1	Isophorone		33	190	U
88-75-5	2-Nitrophenol		47	370	U
105-67-9	2,4-Dimethylphenol		59	370	U
111-91-1	Bis(2-chloroethoxy)methane		51	190	U
120-83-2	2,4-Dichlorophenol		45	370	U
91-20-3	Naphthalene		26	190	U
106-47-8	4-Chloroaniline		32	370	U
87-68-3	Hexachlorobutadiene		30	190	U
59-50-7	4-Chloro-3-methylphenol		28	370	U
91-57-6	2-Methylnaphthalene		34	190	U
77-47-4	Hexachlorocyclopentadiene		35	190	U
88-06-2	2,4,6-Trichlorophenol		35	370	U
95-95-4	2,4,5-Trichlorophenol		28	370	U
91-58-7	2-Chloronaphthalene		46	190	U
88-74-4	2-Nitroaniline		28	370	U
131-11-3	Dimethylphthalate		18	190	U
606-20-2	2,6-Dinitrotoluene		20	190	U
208-96-8	Acenaphthylene		34	190	U
99-09-2	3-Nitroaniline		25	370	U
83-32-9	Acenaphthene		34	190	U
51-28-5	2,4-Dinitrophenol		18	370	U
100-02-7	4-Nitrophenol		52	370	U
121-14-2	2,4-Dinitrotoluene		23	190	U
132-64-9	Dibenzofuran		34	190	U
84-66-2	Diethylphthalate		21	190	U

ANALYSIS DATA SHEET

SW8270D

P001-S005-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-0762.d | Sampled: 08/07/14 00:00

Initial/Final: 30.5g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-07 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 13 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 18:24

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		24	190	U
86-73-7	Fluorene		25	190	U
100-01-6	4-Nitroaniline		50	370	U
534-52-1	4,6-Dinitro-2-methylphenol		51	370	U
86-30-6	N-Nitrosodiphenylamine (1)		34	190	U
101-55-3	4-Bromophenyl-phenylether		29	190	U
118-74-1	Hexachlorobenzene		25	190	U
87-86-5	Pentachlorophenol		49	370	U
85-01-8	Phenanthrene	14	11	190	J
120-12-7	Anthracene		9.7	190	U
86-74-8	Carbazole		20	190	U
84-74-2	Di-n-butylphthalate		28	190	U
206-44-0	Fluoranthene	36	28	190	J
129-00-0	Pyrene	29	25	190	J
85-68-7	Butylbenzylphthalate		30	190	U
91-94-1	3,3'-Dichlorobenzidine		39	190	U
117-81-7	bis(2-ethylhexyl)Phthalate		35	190	U
56-55-3	Benzo (a) anthracene		31	190	U
218-01-9	Chrysene	25	12	190	J
117-84-0	Di-n-octylphthalate		38	190	U
205-99-2	Benzo (b) fluoranthene	34	29	190	J
207-08-9	Benzo(k)fluoranthene		27	190	U
50-32-8	Benzo (a) pyrene		21	190	U
193-39-5	Indeno(1,2,3-cd)pyrene		33	190	U
53-70-3	Dibenzo(a,h)anthracene		53	190	U
191-24-2	Benzo (g,h,i) perylene	57	34	190	J
100-52-7	Benzaldehyde		30	190	U
105-60-2	Caprolactam		32	190	U
1912-24-9	Atrazine		22	190	U
92-52-4	1,1'-Biphenyl		45	190	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3780	3051	81	35 - 105	
Phenol-d5	3780	2458	65	40 - 100	
Nitrobenzene-d5	1890	1251	66	35 - 100	

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S005-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-0762.d | Sampled: 08/07/14 00:00

Initial/Final: 30.5g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-07 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 13 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 18:24

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	1890	1361	72	45 - 105	
2.4.6-Tribromophenol	3780	3410	90	35 - 125	
Terphenyl-d14	1890	1607	85	30 - 125	

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
000112-84-5	13-Docosenamide, (Z)-	370	1263920	24.025	93	JN
191-07-1	Coronene	670	2282072	28.477	95	JN
791-28-6	Triphenylphosphine oxide	350	1425551	22.786	97	JN
NA	Unknown 2.459	1100	4130580	2.459	0	J
NA	Unknown 23.144	160	629517	23.144	0	J
NA	Unknown 4.219	9100	33937610	4.219	0	J

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.

(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.

(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S006-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550C MOD_SV File ID: 1408024-04D62.d Sampled: 08/07/14 00:00

Initial/Final: 30.3g / 1000uL Sulfur Cleanup: N Lab ID: 1408024-04 Received: 08/08/14 09:04

Dilution: 10 pH: Florisil Cleanup: N Prepared: 08/12/14 09:00

% Moisture: 22 GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/15/14 23:01

Batch: 4080818 Sequence: 4H15001 Calibration: 4072701 Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		700	4200	U
111-44-4	Bis(2-chloroethyl)ether		250	2200	U
95-57-8	2-Chlorophenol		680	4200	U
95-48-7	2-Methylphenol		490	4200	U
108-60-1	2,2'-oxybis(1-Chloropropane)		320	2200	U
106-44-5	3 & 4-Methylphenol		430	4200	U
621-64-7	N-Nitroso-di-N-propylamine		400	2200	U
98-86-2	Acetophenone		560	2200	U
67-72-1	Hexachloroethane		1400	2200	U
98-95-3	Nitrobenzene		530	2200	U
78-59-1	Isophorone		370	2200	U
88-75-5	2-Nitrophenol		530	4200	U
105-67-9	2,4-Dimethylphenol		660	4200	U
111-91-1	Bis(2-chloroethoxy)methane		570	2200	U
120-83-2	2,4-Dichlorophenol		500	4200	U
91-20-3	Naphthalene		290	2200	U
106-47-8	4-Chloroaniline		350	4200	U
87-68-3	Hexachlorobutadiene		330	2200	U
59-50-7	4-Chloro-3-methylphenol		310	4200	U
91-57-6	2-Methylnaphthalene		380	2200	U
77-47-4	Hexachlorocyclopentadiene		400	2200	U
88-06-2	2,4,6-Trichlorophenol		390	4200	U
95-95-4	2,4,5-Trichlorophenol		310	4200	U
91-58-7	2-Chloronaphthalene		510	2200	U
88-74-4	2-Nitroaniline		310	4200	U
131-11-3	Dimethylphthalate		200	2200	U
606-20-2	2,6-Dinitrotoluene		220	2200	U
208-96-8	Acenaphthylene		380	2200	U
99-09-2	3-Nitroaniline		280	4200	U
83-32-9	Acenaphthene		380	2200	U
51-28-5	2,4-Dinitrophenol		200	4200	U
100-02-7	4-Nitrophenol		580	4200	U
121-14-2	2,4-Dinitrotoluene		260	2200	U
132-64-9	Dibenzofuran		380	2200	U
84-66-2	Diethylphthalate		240	2200	U

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S006-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550C MOD_SV File ID: 1408024-04D62.d Sampled: 08/07/14 00:00

Initial/Final: 30.3g / 1000uL Sulfur Cleanup: N Lab ID: 1408024-04 Received: 08/08/14 09:04

Dilution: 10 pH: Florisil Cleanup: N Prepared: 08/12/14 09:00

% Moisture: 22 GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/15/14 23:01

Batch: 4080818 Sequence: 4H15001 Calibration: 4072701 Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		270	2200	U
86-73-7	Fluorene		280	2200	U
100-01-6	4-Nitroaniline		560	4200	U
534-52-1	4,6-Dinitro-2-methylphenol		570	4200	U
86-30-6	N-Nitrosodiphenylamine (1)		380	2200	U
101-55-3	4-Bromophenyl-phenylether		320	2200	U
118-74-1	Hexachlorobenzene		280	2200	U
87-86-5	Pentachlorophenol		550	4200	U
85-01-8	Phenanthrene	2500	130	2200	JD
120-12-7	Anthracene	370	110	2200	JD
86-74-8	Carbazole	300	220	2200	JD
84-74-2	Di-n-butylphthalate		310	2200	U
206-44-0	Fluoranthene	2500	310	2200	JD
129-00-0	Pyrene	1800	280	2200	JD
85-68-7	Butylbenzylphthalate		340	2200	U
91-94-1	3,3'-Dichlorobenzidine		440	2200	U
117-81-7	bis(2-ethylhexyl)Phthalate		390	2200	U
56-55-3	Benzo (a) anthracene	880	350	2200	JD
218-01-9	Chrysene	1000	130	2200	JD
117-84-0	Di-n-octylphthalate		420	2200	U
205-99-2	Benzo (b) fluoranthene	1100	330	2200	JD
207-08-9	Benzo(k)fluoranthene	520	300	2200	JD
50-32-8	Benzo (a) pyrene	740	230	2200	JD
193-39-5	Indeno(1,2,3-cd)pyrene	450	370	2200	JD
53-70-3	Dibenzo(a,h)anthracene		590	2200	U
191-24-2	Benzo (g,h,i) perylene	440	380	2200	JD
100-52-7	Benzaldehyde		340	2200	U
105-60-2	Caprolactam		360	2200	U
1912-24-9	Atrazine		250	2200	U
92-52-4	1,1'-Biphenyl		500	2200	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	4230	2389	56	35 - 105	D
Phenol-d5	4230	ND		40 - 100	D
Nitrobenzene-d5	2115	ND		35 - 100	D

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW8270D

P001-S006-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550C MOD_SV File ID: 1408024-04D62.d Sampled: 08/07/14 00:00

Initial/Final: 30.3g / 1000uL Sulfur Cleanup: N Lab ID: 1408024-04 Received: 08/08/14 09:04

Dilution: 10 pH: Florisil Cleanup: N Prepared: 08/12/14 09:00

% Moisture: 22 GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/15/14 23:01

Batch: 4080818 Sequence: 4H15001 Calibration: 4072701 Instrument: 5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	2115	ND		45 - 105	D
2,4,6-Tribromophenol	4230	2360	56	35 - 125	D
Terphenyl-d14	2115	ND		30 - 125	D

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
22346-58-3	9H-Xanthen-9-one, 2,7-dichloro-1-hydroxy	1800	408573	26.08	89	JDN
791-28-6	Triphenylphosphine oxide	4000	1125387	22.784	92	JDN
NA	Unknown 2.457	1200	182016	2.457	0	JD
NA	Unknown 25.609	1600	358577	25.609	0	JD
NA	Unknown 26.264	1100	241327	26.264	0	JD
NA	Unknown 26.489	1200	263943	26.489	0	JD
NA	Unknown 27.779	2000	451814	27.779	0	JD
NA	Unknown 3.194	880	129469	3.194	0	JD
NA	Unknown 4.176	11000	1699565	4.176	0	JD

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.

(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.

(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

OTHER ANALYTES WORK TABLE

PROJECT: Wildroot Building Site
SAMPLING DATE: August 7, 2014
SAMPLE #/CONCENTRATION (ug/Kg)

Polychlorinated Biphenyls as Aroclors (ug/kg)	Matrix / Field Sample ID / Lab Sample ID / Sample Wt./Vol. / % Moisture / Dilution Factor / MDL	Soil P001-S002-0002-01 1408024-01 30.3 g/5000ul 9 1	Soil P001-S003-0002-01 1408024-02 30.2 g/5000ul 4 1	Soil P001-S003-0002-02[1] 1408024-03 30.5 g/1000ul 4 1	Soil P001-S006-0002-02 1408024-04 30.2 g/5000ul 22 1
Aroclor-1016	2.80	U	U	U	U
Aroclor-1221	5.40	U	U	U	U
Aroclor-1232	4.90	U	U	U	U
Aroclor-1242	1.90	U	U	U	U
Aroclor-1248	1.20	U	U	U	U
Aroclor-1254	1.70	21.5	49.4 NJ	41.5	U
Aroclor-1260	1.80	U	35.2	25.0	U

Polychlorinated Biphenyls as Aroclors (ug/kg)	Matrix / Field Sample ID / Lab Sample ID / Sample Wt./Vol. / % Moisture / Dilution Factor / LOQ	Soil P001-S001-0002-01 1408024-05 30.1 g/5000ul 9 1	Soil P001-S004-0002-01DL 1408024-06RE 1.0 g/5000ul 3 10	Soil P001-S005-0002-01 1408024-07 30.5 g/5000ul 13 1
Aroclor-1016	2.80	U	U	U
Aroclor-1221	5.40	U	U	U
Aroclor-1232	4.90	U	U	U
Aroclor-1242	1.90	U	U	U
Aroclor-1248	1.20	U	U	U
Aroclor-1254	1.70	90.6	U	U
Aroclor-1260	1.80	32.2	*960 J	U

* 1 X D/F

[1] A field duplicate of P001-S003-0002-01

J - estimated value

JN - presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

Sample Wt./Vol. = Sample weight/volume

MDL - Method Detection Limit

Note: MDL reported on the Form Is for the soil matrix have been adjusted to reflect the sample weight/volume, percent moisture and dilution factor.

ANALYSES DATA PACKAGE COVER PAGE

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Laboratory: COMPUCHEM

SDG: 1408024

Client Sample Id:	Analysis:	Lab Sample Id:
P001-S002-0002-01	8082A	1408024-01
P001-S003-0002-01	8082A	1408024-02
P001-S003-0002-02	8082A	1408024-03
P001-S006-0002-01	8082A	1408024-04
P001-S001-0002-01	8082A	1408024-05
P001-S004-0002-01	8082A	1408024-06
P001-S004-0002-01	8082A	1408024-06RE1
P001-S005-0002-01	8082A	1408024-07

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions addressed in the narrative. Release of the data contained in this hardcopy data package and in the Electronic Data Deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Quentisha Forrester Name: Quentisha Forrester

Date: 08/20/2014 Title: Chemist III

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH
nelac

501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050

CompuChem

A division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE
SDG # 1408024
PROTOCOL: SW-846

SAMPLE IDENTIFICATIONS: P001-S002-0002-01 P001-S003-0002-01 P001-S003-0002-02 P001-S006-0002-01 P001-S001-0002-01 P001-S004-0002-01 P001-S005-0002-01

The 7 soil samples listed above were received intact, properly refrigerated at 5.2°C, with proper documentation, in sealed shipping containers, on August 8, 2014. The samples were scheduled for the requested analysis of the PCB fraction. The requested SW-846, 3rd Edition, Update 4, Method 8082A was used to prepare and analyze the samples, with the exceptions and/or additions requested by the client. Sample P001-S004-0002-01 was prepped using Waste Dilution (Method 3580A), by diluting 1.0g of sample to 5 mL in hexane, and then analyzed by 8082A method. All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices are included in the sample data sections.

PCBs

Extraction and analysis holding time requirements were met for the samples. Sulfur cleanup was performed on the samples with a Sulfur cleanup Blank. Percent moistures ranged from 3 and 22 percent.

Aroclor target analytes were confirmed above the reporting limits in these samples.

All QC criteria were met for all initial, second-source and continuing calibration standards associated to this SDG with the following exceptions. The continuing calibration standard AR16603BN (4H13008-CCV8) failed for Aroclors 1260 and DCB on both columns during the analyses of P001-S004-0002-01. P001-S004-0002-01 was reanalyzed at a dilution and all QC criteria were met, but the Aroclor 1260 present in the neat analysis was not detected. We are reporting both analyses of P001-S004-0002-01.

Manual integrations were performed on any of the process files associated with this SDG. Please see the detailed Manual Integration Summary report that is located in section P. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

All of the surrogate recoveries were within the control limits.

The method blank associated with the samples met all quality control criteria.

P001-S003-0002-01 was used as the original to prepare the duplicate matrix spikes as requested. The associated duplicate matrix spikes met all of the advisory accuracy criteria.
The Laboratory Control Samples (LCS/LCSD) prepared and analyzed with the samples met quality control criteria.

An uncertainty of these test results may be estimated from the recovery of the surrogates added to the sample prior to sample preparation or from the recovery of spiked compound(s) in the associated laboratory control sample. Further information is available upon request.

I certify that the tests used in this report meet all requirements of the NELAC standards unless otherwise stated in the SDG narrative or QA notice. I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on CD has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Quentisha Forrester
Chemist III
August 21, 2014

CompuChem

A division of Liberty Analytical Corporation

Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC/HPLC chemists. An Extracted Ion Current Profile (EICP) or a GC/HPLC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC/HPLC analysis. The manual editing/integration flags are:

M - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak. The most common reasons for performing manual integrations/editing are: the compound was not found by the automatic integration routine, the compound was incorrectly integrated by the automatic integration routine, and the co-eluting compounds were incorrectly integrated by the automatic integration routine.

H - Denotes that the data reviewer, GC/MS operator, or GC/HPLC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

MH - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

L - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

ML - Denotes that an alternate GC/MS library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

These codes will appear in the GC/MS and GC/HPLC raw data.

ORGANIC DATA REPORTING QUALIFIERS

On the appropriate reporting form, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on the appropriate reporting form for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1:1 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide and/or Aroclor or other GC or HPLC identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search and must be used with the J flag. For generic characterization of a TIC such as "chlorinated hydrocarbon" (or for an "unknown," with no matches ≥ 85%), the N flag is not used.

P : In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the Form I and flagged with a P.
For SW-846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the lower of the two values is reported and flagged with a P on the reporting form. When the RPD is equal to or less than 40%, our policy is to also report the lower of the two values, although the choice could be a project specific issue. These SW-846 policies are consistent with Method 8000C. If Method 8000B is required, the higher of the two values is reported. For certain HPLC analyses, if one of the HPLC columns displays co-elution of target analytes, all results are reported from a primary column displaying no co-elution. Results are still flagged with a P if the RPD between columns is greater than 40%.

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

DATA REPORTING QUALIFIERS (continued)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a concentration greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a concentration greater than the upper level of the calibration range will have the result flagged with an E on the appropriate reporting form for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on the appropriate reporting form for the more diluted sample, and **all** reported concentrations on that form are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate reporting forms are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses <u>are not combined</u> on a single reporting form.

A: This flag indicates that a TIC is a suspected aldol-condensation product.

S: In the SOM01.2 SOW document, this flag is used to indicate an estimated value for Aroclor target compounds where a valid 5-point initial calibration was not performed prior to the analytes detection in a sample. If an "S" flag is used for a specific Aroclor, then a reanalysis of the sample is required after a valid 5-point calibration is performed for the detected Aroclor. The "S" flag is not utilized for non CLP analyses.

* This flag is applied to a target analyte when any QC acceptance criterion has not been met for that analyte. The flag appears on the reporting form of the associated QC analysis.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y, and Z.

ANALYSIS DATA SHEET

8082A

P001-S002-0002-01

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550C MOD (File ID: 121b1408024-01.d Sampled: 08/07/14 00:00

Initial/Final: 30.3g / 5000uL Sulfur Cleanup: Y Lab ID: 1408024-01 Received: 08/08/14 09:04

Dilution: 1 pH: Florisil Cleanup: N Prepared: 08/11/14 09:16

% Moisture: 9 GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/14/14 23:43

Batch: 4080817 Sequence: 4H13008 Calibration: 4081101 Instrument: tracegc86

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
12674-11-2	Aroclor-1016		3.06	18.6	U
11104-28-2	Aroclor-1221		5.89	18.6	U
11141-16-5	Aroclor-1232		5.35	18.6	U
53469-21-9	Aroclor-1242		2.07	18.6	U
12672-29-6	Aroclor-1248		1.31	18.6	U
11097-69-1	Aroclor-1254	21.5	1.86	18.6	
11096-82-5	Aroclor-1260		1.96	18.6	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
DCB (A)	21.83	15.86	73	43 - 144	
DCB (A) [2C]	21.83	21.43	98	43 - 144	
TCX (A)	10.91	8.952	82	43 - 135	
TCX (A) [2C]	10.91	10.13	93	43 - 135	

* Values outside of QC limits

CompuChem
A Division Of
Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8082A

P001-S003-0002-01

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD (| File ID: 122b1408024-02.d | Sampled: 08/07/14 00:00

Initial/Final: 30.2g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408024-02 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/11/14 09:16

% Moisture: 4 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 00:12

Batch: 4080817 | Sequence: 4H13008 | Calibration: 4081101 | Instrument: tracegc86

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
12674-11-2	Aroclor-1016		2.89	17.6	U
11104-28-2	Aroclor-1221		5.57	17.6	U
11141-16-5	Aroclor-1232		5.06	17.6	U
53469-21-9	Aroclor-1242		1.96	17.6	U
12672-29-6	Aroclor-1248		1.24	17.6	U
11097-69-1	Aroclor-1254	49.4	1.76	17.6	P NJ
11096-82-5	Aroclor-1260	35.2	1.86	17.6	

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
DCB (A)	20.65	13.62	66	43 - 144	
DCB (A) [2C]	20.65	25.68	124	43 - 144	
TCX (A)	10.32	11.55	112	43 - 135	
TCX (A) [2C]	10.32	13.35	129	43 - 135	

* Values outside of QC limits

CompuChem
A Division Of
Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8082A

P001-S003-0002-02

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550C MOD (File ID: 123b1408024-03.d Sampled: 08/07/14 00:00

Initial/Final: 30.5g / 5000uL Sulfur Cleanup: Y Lab ID: 1408024-03 Received: 08/08/14 09:04

Dilution: 1 pH: Florisil Cleanup: N Prepared: 08/11/14 09:16

% Moisture: 4 GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/15/14 00:41

Batch: 4080817 Sequence: 4H13008 Calibration: 4081101 Instrument: tracegc86

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
12674-11-2	Aroclor-1016		2.86	17.4	U
11104-28-2	Aroclor-1221		5.52	17.4	U
11141-16-5	Aroclor-1232		5.01	17.4	U
53469-21-9	Aroclor-1242		1.94	17.4	U
12672-29-6	Aroclor-1248		1.23	17.4	U
11097-69-1	Aroclor-1254	41.5	1.74	17.4	P
11096-82-5	Aroclor-1260	25.0	1.84	17.4	

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
DCB (A)	20.46	12.97	63	43 - 144	
DCB (A) [2C]	20.46	19.88	97	43 - 144	
TCX (A)	10.23	8.090	79	43 - 135	
TCX (A) [2C]	10.23	9.952	97	43 - 135	

* Values outside of QC limits

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8082A

P001-S006-0002-01

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_C | File ID: 124b1408024-04.d | Sampled: 08/07/14 00:00

Initial/Final: 30.2g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408024-04 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/11/14 09:16

% Moisture: 22 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 01:10

Batch: 4080817 | Sequence: 4H13008 | Calibration: 4081101 | Instrument: tracegc86

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
12674-11-2	Aroclor-1016		3.56	21.6	U
11104-28-2	Aroclor-1221		6.87	21.6	U
11141-16-5	Aroclor-1232		6.24	21.6	U
53469-21-9	Aroclor-1242		2.42	21.6	U
12672-29-6	Aroclor-1248		1.53	21.6	U
11097-69-1	Aroclor-1254		2.16	21.6	U
11096-82-5	Aroclor-1260		2.29	21.6	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
DCB (A)	25.46	20.53	81	43 - 144	
DCB (A) [2C]	25.46	33.25	131	43 - 144	
TCX (A)	12.73	11.83	93	43 - 135	
TCX (A) [2C]	12.73	13.29	104	43 - 135	

* Values outside of QC limits

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8082A

P001-S001-0002-01

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD (| File ID: 125b1408024-05.d | Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408024-05 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/11/14 09:16

% Moisture: 9 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 01:39

Batch: 4080817 | Sequence: 4H13008 | Calibration: 4081101 | Instrument: tracegc86

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
12674-11-2	Aroclor-1016		3.05	18.5	U
11104-28-2	Aroclor-1221		5.89	18.5	U
11141-16-5	Aroclor-1232		5.34	18.5	U
53469-21-9	Aroclor-1242		2.07	18.5	U
12672-29-6	Aroclor-1248		1.31	18.5	U
11097-69-1	Aroclor-1254	90.6	1.85	18.5	
11096-82-5	Aroclor-1260	32.2	1.96	18.5	

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
DCB (A)	21.80	9.850	45	43 - 144	
DCB (A) [2C]	21.80	18.84	86	43 - 144	
TCX (A)	10.90	9.819	90	43 - 135	
TCX (A) [2C]	10.90	11.04	101	43 - 135	

* Values outside of QC limits

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH
nelac

ANALYSIS DATA SHEET

8082A

P001-S004-0002-01

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 136b1408024-06.d | Sampled: 08/07/14 00:00

Initial/Final: 1g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408024-06 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 12:15

% Moisture: 3 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 07:00

Batch: 4081110 | Sequence: 4H13008 | Calibration: 4081101 | Instrument: tracegc86

CAS NO.	COMPOUND	CONC. (ug/kg)	MDL	RL	Q
12674-11-2	Aroclor-1016		2.8	17	U
11104-28-2	Aroclor-1221		5.4	17	U
11141-16-5	Aroclor-1232		4.9	17	U
53469-21-9	Aroclor-1242		1.9	17	U
12672-29-6	Aroclor-1248		1.2	17	U
11097-69-1	Aroclor-1254		1.7	17	U
11096-82-5	Aroclor-1260	960	1.8	17	

SYSTEM MONITORING COMPOUND	ADDED (ug/kg)	CONC (ug/kg)	% REC	QC LIMITS	Q
DCB (A)	300.0	162.6	54	43 - 144	
DCB (A) [2C]	300.0	184.9	62	43 - 144	
TCX (A)	150.0	121.9	81	43 - 135	
TCX (A) [2C]	150.0	142.8	95	43 - 135	

* Values outside of QC limits

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8082A

P001-S004-0002-01DL

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 051e1408024-06.d | Sampled: 08/07/14 00:00

Initial/Final: 1g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408024-06RE1 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 12:15

% Moisture: 3 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 13:24

Batch: 4081110 | Sequence: 4H14007 | Calibration: 4081501 | Instrument: agilent90

CAS NO.	COMPOUND	CONC. (ug/kg)	MDL	RL	Q
12674-11-2	Aroclor-1016		28	170	U
11104-28-2	Aroclor-1221		54	170	U
11141-16-5	Aroclor-1232		49	170	U
53469-21-9	Aroclor-1242		19	170	U
12672-29-6	Aroclor-1248		12	170	U
11097-69-1	Aroclor-1254		17	170	U
11096-82-5	Aroclor-1260	* 960	18	170	J

SYSTEM MONITORING COMPOUND	ADDED (ug/kg)	CONC (ug/kg)	% REC	QC LIMITS	Q
DCB (A)	300.0	406.5	136	43 - 144	D
DCB (A) [2C]	300.0	385.0	128	43 - 144	D
TCX (A)	150.0	156.0	104	43 - 135	D
TCX (A) [2C]	150.0	166.0	111	43 - 135	D

* Values outside of QC limits

* Value transferred from the original analysis. — 1 x D/F

(5)

CompuChem
A Division Of
Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8082A

P001-S005-0002-01

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_C | File ID: 126b1408024-07.d | Sampled: 08/07/14 00:00

Initial/Final: 30.5g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408024-07 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/11/14 09:16

% Moisture: 13 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 02:08

Batch: 4080817 | Sequence: 4H13008 | Calibration: 4081101 | Instrument: tracegc86

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
12674-11-2	Aroclor-1016		3.18	19.3	U
11104-28-2	Aroclor-1221		6.12	19.3	U
11141-16-5	Aroclor-1232		5.56	19.3	U
53469-21-9	Aroclor-1242		2.15	19.3	U
12672-29-6	Aroclor-1248		1.36	19.3	U
11097-69-1	Aroclor-1254		1.93	19.3	U
11096-82-5	Aroclor-1260		2.04	19.3	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
DCB (A)	22.68	16.56	73	43 - 144	
DCB (A) [2C]	22.68	16.21	71	43 - 144	
TCX (A)	11.34	7.522	66	43 - 135	
TCX (A) [2C]	11.34	7.925	70	43 - 135	

* Values outside of QC limits

CompuChem
A Division Of
Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

B. Chain of Custody Records

The laboratory shall include a copy of the Chain-of-Custody (CoC) documentation for all of the samples in the Work Order/SDG.

USEPA
DateShipped: 8/7/2014
CarrierName: FedEx
AirbillNo: 7707 8581 7446

CHAIN OF CUSTODY RECORD
Case #: 306
Contact Name: Peter Lisichenko
Contact Phone: 6035124350

No: 2-080714-151350-0005
Cooler #: 2A
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
1408024-01	P001-S002-0002-01	P001-S002	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S002-0002-01	P001-S002	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S002-0002-01	P001-S002	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S002-0002-01	P001-S002	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408024-02	P001-S003-0002-01	P001-S003	VOCs	Soil	8/7/2014	6	5 gram Encore	0 C	Y
	P001-S003-0002-01	P001-S003	SVOC + PCB	Soil	8/7/2014	2	8 oz	0 C	Y
	P001-S003-0002-01	P001-S003	Percent Moisture	Soil	8/7/2014	2	2 oz	0 C	Y
	P001-S003-0002-01	P001-S003	Metals + Hg	Soil	8/7/2014	2	8 oz	0 C	Y
1408024-03	P001-S003-0002-02	P001-S003	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S003-0002-02	P001-S003	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S003-0002-02	P001-S003	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S003-0002-02	P001-S003	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408024-04	P001-S004-0002-01	P001-S004	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
~~1408024-05~~	~~P001-S005-0002-01~~	~~P001-S005~~	~~VOCs~~	~~Soil~~	~~8/7/2014~~	~~3~~	~~5 gram Encore~~	~~0 C~~	~~N~~
1408024-07	P001-S005-0002-01	P001-S005	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S005-0002-01	P001-S005	Percent Moisture *	Soil	8/7/2014	1	2 oz *	0 C	N
1408024-07	P001-S005-0002-01	P001-S005	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408024-08	P001-S006-0002-01	P001-S006	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S006-0002-01	P001-S006	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N

PL.

Special Instructions: RFP 306

*did not receive % moisture 2oz jar for P001-S005-0002-01 where VOA was crossed off rec'd @ 5.2°C (BR) 8/8/14

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL SAMPLES ALL ANALYSIS	[signature] (WESTON)	8/7/14	[signature] Doe / CompuChem	8/8/14 0904	good condition (BR) 8/8/14

USEPA
DateShipped: 8/7/2014
CarrierName: FedEx
AirbillNo: 7707 8581 7446

CHAIN OF CUSTODY RECORD
Case #: 306
Contact Name: Peter Lisichenko
Contact Phone: 6035124350

No: 2-080714-151350-0005
Cooler #: 2A
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
1408021-01	P001-S006-0002-01	P001-S006	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
↓	P001-S006-0002-01	P001-S006	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408019-10	P001-UST01-LW-01	UST01	VOCs	Liquid Waste	8/7/2014	1	4 oz	None	N
	P001-UST01-LW-01	UST01	SVOC+PCB+PEST	Liquid Waste	8/7/2014	1	8 oz	None	N
	P001-UST01-LW-01	UST01	RCRA	Liquid Waste	8/7/2014	1	8 oz	None	N
↓	P001-UST01-LW-01	UST01	METALS+Hg	Liquid Waste	8/7/2014	1	500 ml	None	N
1408021-05	P001-S001-0002-01	P001-S001	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S001-0002-01	P001-S001	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S001-0002-01	P001-S001	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
↓	P001-S001-0002-01	P001-S001	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N

Special Instructions: RFP 306 rec'd @ 5.2°C

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL SAMPLES ALL ANALYSES	(WESTON)	8/7/14	CompuChem	8/8/14 0904	good condition 8/8/14

REGION II RST 2 DATA ASSESSMENT REPORT

SITE: Wildroot Building Site **SDG No.:** 1408019 and 1408028

LAB: Compuchem a Division of Liberty Analytical Corporation, Cary, NC

ANALYSIS: Pesticides (PEST)

No. of Samples/Matrix: 11 Waste

CONTRACTOR: RST 3

The following table summarizes the analytical methods used for the requested analyses and the U.S. EPA, Region 2 data validation standard operating procedures (SOPs) used for data validation.

Analysis	Analytical Method	Data Validation SOP No.
Pesticides	SW-846 Method 8081A	No. HW-44 (Revision 1.1), December 2010

All data were found to be valid and acceptable except those analytes which have been rejected, "R" (unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's Signature: Smita Sumbaly **Date:** 10/09/2014

Verified By: _____ **Date:** 10/9/14

On August 6 and 7, 2014, U.S. EPA, Region II, RST 3 personnel collected 11 liquid/solid waste samples for pesticide analysis from the Wildroot Building Site, located at 1740 Bailey Avenue, Buffalo, Erie County, New York. These samples were shipped under Chain of Custody for the requested analysis to Comuchem a Division of Liberty Analytical Corporation, 501 Madison Avenue, Cary, North Carolina. The laboratory verified that samples were received intact, properly sealed, and refrigerated. Sample cooler temperatures measured 24.2 to 24.6°C.

Field Sample ID	Lab Sample ID	Matrix	Analysis	Sampling Date
SDG No.: 1408019				
P001-COMP01-LW-01	1408019-01	Liquid Waste	Pesticide	8/06/2014
P001-DR0314-LW-01	1408019-02	Liquid Waste	Pesticide	8/06/2014
P001-PL0202-SW-01	1408019-03	Solid Waste	Pesticide	8/06/2014
P001-DR0310-LW-01	1408019-04	Liquid Waste	Pesticide	8/06/2014
P001-DR0312-LW-01	1408019-05	Liquid Waste	Pesticide	8/06/2014
P001-DR0702-SW-01	1408019-06	Solid Waste	Pesticide	8/06/2014
P001-DR0302-LW-01	1408019-07	Liquid Waste	Pesticide	8/06/2014
P001-DR0501-LW-01	1408019-08	Liquid Waste	Pesticide	8/06/2014
P001-UST01-LW-01	1408019-10	Liquid Waste	Pesticide	8/07/2014
SDG No.: 1408028				
P001-COMP02-LW-01	1408028-01	Liquid Waste	Pesticide	8/06/2014
P001-DR0502-LW-01	1408028-02	Liquid Waste	Pesticide	8/06/2014

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.

SDG Nos.: 1408019 and 1408028

All holding times were met.

2. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

SDG No.: 1408019

PEST In sample P001-COMP01-LW-01, Tetrachloro-m-xylene (TCMX) surrogate compound and in sample P001-DR0501-LW-01 decachlorobiphenyl (DCB) surrogate compound recoveries were less than 10% (0% in column 2) and cannot find the peak for surrogate compounds due to interference. Both the samples are diluted 10 X and 50 X respectively. No qualifiers were applied to results obtained from the 10x and 50 X dilution analyses because the surrogates should have been lost in the dilution.

PEST In sample P001-DR0314-LW-01, DCB(A) surrogate compounds recovery was less than 10% (0% in column 1). The non-detects were rejected (R) and all associated positive results were qualified as "J".

PEST In sample P001-PL0202-SW-01, DCB(A) and DCB(A) (2C) surrogate compounds recoveries were 10% and 11% respectively(in column 1 and 2). Using the professional judgment all associated positive results were qualified as "J" and non-detects were qualified as "UJ".

SDG No.: 1408028

PEST In sample P001-DR0502-LW-01, Tetrachloro-m-xylene surrogate compounds recovery was less than 10% (0% in column 1). All associated positive results were qualified as "J" and non-detects were qualified as "UJ".

PEST In sample P001-COMP02-LW-01, Tetrachloro-m-xylene (TCMX) surrogate compound recoveries were less than 10% (0% in column 1) and >200 % (211% in column 2); and decachlorobiphenyl (DCB) surrogate compound recoveries were between 30-200% (in column 1 & 2). Sample was diluted with 10x dilution factor. No qualifiers were applied to results obtained from the 10x dilution analyses because the surrogates should have been lost in the dilution.

3. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

SDG Nos.: 1408019 and 1408028

PEST Not Applicable

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than 5 times the blank contaminant level (10 times for common contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

SDG Nos.: 1408019 and 1408028

A) Method blank contamination:

PEST Blank analysis did not indicate the presence of lab contamination.

B) Field or rinse blank contamination:

Not applicable.

C) Trip blank contamination:

Not applicable.

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatiles Decafluorotriphenyl-phosphine (DFTPP).

If the mass calibration is in error, all associated data will be classified as unusable "R".

SDG Nos.: 1408019 and 1408028

None required qualifications.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be ≥ 0.05 in both initial and continuing calibrations. A value < 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

Not Applicable

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be < 20% and %D must be < 20%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PEST/PCB fraction, if %RSD exceeds 20% for all analytes except for the two surrogates (which must not exceed 30% RSD), or if the %D of calibration verification exceeds 20%, qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the sample shown were qualified for %RSD and %D:

SDG No.: 1408019

PEST The secondary source calibration verification analyzed on 8/19/14 at 15:27 yielded %D>20% for Methoxychlor in both columns. **Methoxychlor** failed %D requirements in secondary source calibration verifications. All positive results qualified as estimated (J) and non-detects were estimated (UJ) in associated samples requested for pesticide analysis.

Methoxychlor - J/UJ - P001-COMP01-LW-01 and P001-DR0314-LW-01[1]

[1] Sample was previously qualified due to other QC criteria.

PEST The continuing calibration check analyzed on 8/19/14 at 00:09 yielded %D>20% (failed). All analytes, except for 4, 4'-DDT, failed %D requirements in closing calibration verifications. All positive results except 4, 4'-DDT qualified as estimated (J) and non-detects were estimated (UJ) in all samples requested for pesticide analysis.

J/UJ – P001-COMP01-LW-01DL and P001-DR0702-SW-01

SDG No.: 1408028

PEST The continuing calibration check analyzed on 8/19/14 at 00:09 yielded %D>20% (failed) in column 1. All analytes, except for 4, 4'-DDT, failed %D requirements in closing calibration verifications. The data validator revised the result on the Form Is by reporting the higher concentration of the two columns (reported results from column 2). Since %D was within the QC criteria in column 2, using the professional judgment no qualifications was required.

7. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. If the area count is greater than 100% of the associated calibration verification standard, all of the positive results for compounds quantified using that IS are qualified as estimated, "J". If the area count is less than 50% of the associated calibration verification standard, all of the positive results for compounds quantified using that IS are qualified as estimated, "J", and the non-detects rejected, "R".

If an internal standard retention time varies by more than 30 seconds, the reviewer will use professional judgment to determine either partial or total rejection of the data for that sample fraction.

SDG Nos.: 1408019 and 1408028

Not Applicable

8. COMPOUND IDENTIFICATION:

A) Pesticide Fraction:

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract. Qualifications were applied to the samples and analytes as shown below.

SDG No.: 1408019

The following pesticide samples have percent differences between analyte results in the range of 26-70%. Detected compounds are qualified J.

Dieldrin - J – P001-COMP01-LW-01

Endosulfan I - J – P001-COMP01-LW-01, P001-DR0310-LW-01, P001-DR0312-LW-01

4, 4'-DDD J – P001-COMP01-LW-01DL[1]

alpha-BHC– P001-COMP01-LW-01DL[1]

Endrin aldehyde– P001-COMP01-LW-01DL[1], P001-DR0310-LW-01

Heptachlor epoxide– P001-COMP01-LW-01DL[1]

Delta-BHC- J – P001-DR0310-LW-01

Endosulfan II - J – P001-DR0310-LW-01

Endrin ketone- J – P001-DR0312-LW-01

gamma-BHC- J – P001-DR0302-LW-01

The following pesticide samples have percent differences between analyte results in the range of 101-200%. Using professional judgment, detected compounds are qualified NJ.

alpha-Chlordane and Endrin – NJ - P001-COMP01-LW-01

The following pesticide samples have percent differences between analyte results exceeding 50% and the results are below CRQL. Detected compounds are qualified U. Non-detected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.

4, 4'-DDD – U (CRQL) – P001-COMP01-LW-01, P001-DR0314-LW-01[1]

4, 4' DDE – U (CRQL) – P001-COMP01-LW-01, P001-COMP01-LW-01DL, P001-DR0310-LW-01, P001-DR0312-LW-01, P001-DR0302-LW-01

alpha-BHC – U (CRQL) – P001-COMP01-LW-01, P001-DR0310-LW-01, P001-DR0312-LW-01, P001-DR0302-LW-01

alpha-Chlordane – U (CRQL) – P001-COMP01-LW-01DL[1], P001-DR0314-LW-01[1]

beta-BHC U (CRQL) – P001-COMP01-LW-01

Endrin – U (CRQL) – P001-COMP01-LW-01DL[1], P001-DR0314-LW-01[1], P001-DR0302-LW-01

Endrin Aldehyde – U (CRQL) – P001-COMP01-LW-01, P001-DR0314-LW-01[1], P001-DR0302-LW-01

Endrin ketone– U (CRQL) – P001-COMP01-LW-01, P001-COMP01-LW-01DL, P001-DR0314-LW-01[1]

Aldrin – U (CRQL) - P001-DR0314-LW-01[1], P001-DR0310-LW-01, P001-DR0312-LW-01, and P001-DR0501-LW-01

gamma-BHC U (CRQL) – P001-COMP01-LW-01, P001-DR0310-LW-01, P001-DR0312-LW-01

Heptachlor - U (CRQL) – P001-COMP01-LW-01

Endosulfan sulfate - U (CRQL) – P001-COMP01-LW-01DL[1]

delta-BHC– U (CRQL) – P001-DR0314-LW-01[1], P001-DR0302-LW-01

gamma-Chlordane – U (CRQL) – P001-DR0302-LW-01

Heptachlor epoxide – U (CRQL) – P001-COMP01-LW-01, P001-DR0310-LW-01, P001-DR0312-LW-01, P001-DR0302-LW-01

Methoxychlor – U (CRQL) – P001-COMP01-LW-01, P001-DR0314-LW-01[1]

Endosulfan II – U (CRQL) - P001-DR0314-LW-01[1], P001-DR0302-LW-01

Dieldrin – U (CRQL) - P001-DR0310-LW-01

SDG No.: 1408028

SW-846 Method 8081A requires the reporting of the lower concentration of the two columns. Due to matrix interference, both the samples P001-COMP02-LW-01 and P001-DR0502-LW-01 yielded poor chromatographic peak resolutions for tetrachloro-m-xylene and peaks were not found in column 1. Continuing calibration also recovered poor recoveries in column 1. Therefore, using the professional judgment revised the result on the Form Is by reporting the higher concentration of the two columns (results from column 2). In the same sample, the following analyte concentrations varied more than 25% between the two columns, thus qualified as below per SOP

The following pesticide samples have percent differences between analyte results in the range of 26-70%. Detected compounds are qualified J.

4, 4'-DDT - J – P001-COMP02-LW-01

Alpha-BHC - J – P001-COMP02-LW-01

Beta-BHC - J – P001-COMP02-LW-01

Dieldrin - J – P001-COMP02-LW-01 and P001-DR0502-LW-01

Endosulfan sulfate - J – P001-DR0502-LW-01

Endrin Ketone - J – P001-DR0502-LW-01

gamma-BHC - J – P001-DR0502-LW-01

The following pesticide samples have percent differences between analyte results in the range of 71-100%. Using professional judgment, detected compounds are qualified NJ.

4, 4'-DDT – JN - P001-DR0502-LW-01

alpha-BHC – JN - P001-DR0502-LW-01

4, 4'- DDD – JN - P001-DR0502-LW-01

4, 4' DDE – JN – P001-COMP02-LW-01

gamma-Chlordane – JN – P001-COMP02-LW-01

Heptachlor epoxide – JN – P001-COMP02-LW-01

Methoxychlor – JN – P001-COMP02-LW-01

The following pesticide samples have percent differences between analyte results exceeding 50% and the results are below CRQL. Detected compounds are qualified U. Non-detected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.

4, 4'-DDD – U (CRQL) – P001-COMP02-LW-01 and P001-DR0502-LW-01

delta-BHC– U (CRQL) – P001-COMP02-LW-01

Endrin aldehyde – U (CRQL) – P001-COMP02-LW-01

Endrin – U (CRQL) – P001-COMP02-LW-01

Methoxychlor – U (CRQL) –P001-DR0502-LW-01

alpha-BHC – U (CRQL) – P001-DR0502-LW-01

9. METHOD NON-COMPLIANCE:

SDG No.: 1408019 and 1408028

None

10. OTHERS:

SDG No.: 1408019

PESTICIDE: Endosulfan II result is reported in the initial analysis and qualified "J" as the reported value is over the calibration range. Sample result was transferred from the 50 X dilution analysis.

Endosulfan II - J – P001-COMP01-LW-01

Three out of nine samples were analyzed with 10 or 50 times dilution factors, sample results were reported with elevated reporting limits.

SDG No.: 1408028

PESTICIDE:Dieldrin result is reported in the initial analysis and qualified "J" as the reported value is over the calibration range. Due to bad matrix samples, dilution analysis was not done.

Dieldrin – J – P001-DR0502-LW-01[1]

[1] Sample was previously qualified due to other QC criteria.

PESTICIDE: Surrogate recoveries were reported as 0% in both the samples for tetrachloro-m-xylene and the peaks were not found in column 1, due to bad matrix samples were not reanalyzed.

Sample No. P001-COMP02-LW-01 was analyzed with 10 times dilution factor, sample results were reported with elevated reporting limits.

SDG No.: 1408019 and 1408028

PESTICIDE: The following liquid waste samples are analyzed within the primary analysis holding time criteria. However, the cooler temperature exceeds 10°C (24.5°C). Detected compounds are qualified J. Non-detected compounds are qualified UJ.

Samples previously qualified or rejected due to the other QC criteria are not required further qualifications.

Laboratory performed the sulfur cleanup and Florisil cleanup was not performed. All method and instrument blanks were free of contaminants.

All liquid/solid waste sample results and reporting limits were reported on a wet-weight basis.

As per the laboratory, some samples were diluted without running undiluted analysis, due to high levels of hydrocarbons and based on samples color and viscosity.

OTHER ANALYTES WORK TABLE

PROJECT: Wildroot Building Site
SAMPLING DATE: August 6, 2014
SAMPLE #/CONCENTRATION (ug/Kg)

Pesticides (ug/kg)	Matrix Field Sample ID Lab Sample ID Sample Wt./Vol. % Moisture Dilution Factor	Liquid Waste P001-COMP01-LW-01 1408019-01 1g/5000 uL NA 10		Liquid Waste P001-DR0314-LW-01 1408019-02 1g/5000 uL NA 1.0		Solid Waste P001-PL0202-SW-01 1408019-03 1g/5000 uL NA 1.0		Liquid Waste P001-DR0310-LW-01 1408019-04 1g/5000 uL NA 10	
	MDL								
alpha-BHC	2.64	249	UJ	R		U	J	249	UJ
gamma-BHC	1.20	249	UJ	R		U	J	249	UJ
Heptachlor	3.60	249	UJ	R		U	J	60.0	J
Aldrin	2.01	1240	J	6.15	J	U	J	249	UJ
beta-BHC	4.20	249	UJ	R		U	J	U	J
delta-BHC	2.38	75.0	J	4.87	J	U	J	42.1	J
Heptachloro epoxide	1.59	249	UJ	R		U	J	249	U
gamma-Chlordane	1.98	455	J	12.9	J	U	J	U	J
alpha-Chlordane	2.43	523	NJ	3.91	J	U	J	U	J
Endosulfan I	2.31	505	J	R		U	J	38.6	J
4,4'-DDE	2.16	630	UJ	5.05	J	U	J	630	U
Dieldrin	1.68	142	J	R		U	J	630	U
Endrin	1.41	711	NJ	5.95	J	U	J	U	J
4,4'-DDD	2.43	630	UJ	3.27	J	U	J	U	J
Endosulfan II	2.67	*32900	J	4.29	J	U	J	49.6	J
4,4'-DDT	7.50	U	J	R		U	J	U	J
Endrin aldehyde	3.90	630	UJ	6.70	J	U	J	154	J
Endosulfan sulfate	1.86	U	J	R		U	J	24.2	J
Methoxychlor	8.70	2490	UJ	14.5	J	U	J	U	J
Endrin ketone	1.53	630	UJ	29.6	J	U	J	U	J
Toxaphene	450	U	J	R		U	J	U	J

* 50 X D/F

Sample Wt./Vol. = Sample weight/volume
MDL - Method of Detection Limit
Note: MDL reported on the Form Is have been adjusted to reflect the sample wt/volume and dilution factor.
U - Non-detected
J (lab qualifier)- estimated value <RL and ≥ MDL
J - estimated value
R - rejected result
JN - presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

OTHER ANALYTES WORK TABLE

PROJECT: Wildroot Building Site
SAMPLING DATE: August 6, 2014
SAMPLE #/CONCENTRATION (ug/Kg)

Pesticides (ug/kg)	Matrix	Liquid Waste		Solid Waste		Liquid Waste		Liquid Waste	
	Field Sample ID	P001-DR0312-LW-01		P001-DR0702-SW-01		P001-DR0302-LW-01		P001-DR0501-LW-01	
	Lab Sample ID	1408019-05		1408019-06		1408019-07		1408019-08	
	Sample Wt./Vol.	1g/5000 uL		1g/5000 uL		1g/5000 uL		1g/5000 uL	
	% Moisture	NA		NA		NA		NA	
	Dilution Factor	50		10		* 10		50	
	MDL								
alpha-BHC	2.64	1250	UJ	U	J	249	UJ	U	J
gamma-BHC	1.20	1250	UJ	U	J	60.0	J	U	J
Heptachlor	3.60	505	J	U	J	57.5	J	U	J
Aldrin	2.01	1250	UJ	U	J	U	J	1250	UJ
beta-BHC	4.20	U	J	U	J	U	J	U	J
delta-BHC	2.38	U	J	U	J	249	UJ	U	J
Heptachloro epoxide	1.59	1250	UJ	U	J	249	UJ	U	J
gamma-Chlordane	1.98	U	J	U	J	249	UJ	U	J
alpha-Chlordane	2.43	U	J	U	J	U	J	U	J
Endosulfan I	2.31	295	J	U	J	U	J	U	J
4,4'-DDE	2.16	3150	UJ	U	J	630	UJ	U	J
Dieldrin	1.68	U	J	U	J	25.7	J	U	J
Endrin	1.41	U	J	U	J	630	UJ	U	J
4,4'-DDD	2.43	U	J	U	J	U	J	U	J
Endosulfan II	2.67	270	J	U	J	630	UJ	U	J
4,4'-DDT	7.50	U	J	U	J	U	J	U	J
Endrin aldehyde	3.90	U	J	U	J	630	UJ	U	J
Endosulfan sulfate	1.86	U	J	U	J	U	J	U	J
Methoxychlor	8.70	U	J	U	J	U	J	U	J
Endrin ketone	1.53	242	J	U	J	U	J	108	J
Toxaphene	450	U	J	U	J	U	J	U	J

Sample Wt./Vol. = Sample weight/volume
MDL - Method of Detection Limit
Note: MDL reported on the Form Is have been adjusted to reflect the sample wt/volume and dilution factor.
* - results were transferred from the colmn 2
U - Non-detected
J (lab qualifier)- estimated value <RL and ≥ MDL
J - estimated value

OTHER ANALYTES WORK TABLE

PROJECT: Wildroot Building Site
SAMPLING DATE: August 7, 2014
SAMPLE #/CONCENTRATION (ug/Kg)

Pesticides (ug/kg)	Matrix	Liquid Waste	
	Field Sample ID	P001-UST01-LW-01	
	Lab Sample ID	1408019-10	
	Sample Wt./Vol.	1g/5000 uL	
	% Moisture	NA	
	Dilution Factor	1.0	
	MDL		
alpha-BHC	2.64	U	J
gamma-BHC	1.20	U	J
Heptachlor	3.60	U	J
Aldrin	2.01	U	J
beta-BHC	4.20	U	J
delta-BHC	2.38	U	J
Heptachloro epoxide	1.59	U	J
gamma-Chlordane	1.98	U	J
alpha-Chlordane	2.43	U	J
Endosulfan I	2.31	U	J
4,4'-DDE	2.16	U	J
Dieldrin	1.68	U	J
Endrin	1.41	U	J
4,4'-DDD	2.43	U	J
Endosulfan II	2.67	U	J
4,4'-DDT	7.50	U	J
Endrin aldehyde	3.90	U	J
Endosulfan sulfate	1.86	U	J
Methoxychlor	8.70	U	J
Endrin ketone	1.53	U	J
Toxaphene	450	U	J

Sample Wt./Vol. = Sample weight/volume
MDL - Method of Detection Limit
Note: MDL reported on the Form Is have been adjusted to reflect the sample wt/volume and dilution factor.
* - results were transferred from the colmn 2
U - Non-detected
J (lab qualifier)- estimated value <RL and $\geq$ MDL
J - estimated value

OTHER ANALYTES WORK TABLE

PROJECT: Wildroot Building Site
SAMPLING DATE: August 6, 2014
SAMPLE #/CONCENTRATION (ug/Kg)

Pesticides (ug/kg)	Matrix Field Sample ID Lab Sample ID Sample Wt./Vol. % Moisture Dilution Factor	Liquid Waste P001-COMP02-LW-01 1408028-01 1g/5000 uL NA 10		Liquid Waste P001-DRO502-LW-01 1408028-02 1g/5000 uL NA 1.0	
	MDL				
alpha-BHC	2.64	*756	J	*95.0	JN
gamma-BHC	1.20	U	J	*3.44	J
Heptachlor	3.60	U	J	U	J
Aldrin	2.01	*439	J	U	J
beta-BHC	4.20	*1730	J	U	J
delta-BHC	2.38	*249	UJ	U	J
Heptachloro epoxide	1.59	*506	JN	U	J
gamma-Chlordane	1.98	*588	JN	U	J
alpha-Chlordane	2.43	*94.5	J	U	J
Endosulfan I	2.31	U	J	U	J
4,4'-DDE	2.16	*843	JN	U	J
Dieldrin	1.68	*66	J	*4380	J
Endrin	1.41	*630	UJ	U	J
4,4'-DDD	2.43	*630	UJ	*474	JN
Endosulfan II	2.67	*114	J	U	J
4,4'-DDT	7.50	*532	J	*589	JN
Endrin aldehyde	3.90	*630	UJ	U	J
Endosulfan sulfate	1.86	U	J	*286	J
Methoxychlor	8.70	*5710	JN	*249	UJ
Endrin ketone	1.53	*356	J	*161	J
Toxaphene	450	U	J	U	J

Sample Wt./Vol. = Sample weight/volume
MDL - Method of Detection Limit
Note: MDL reported on the Form Is have been adjusted to reflect the sample wt/volume and dilution factor.
* - results were transferred from the colmn 2
U - Non-detected
J (lab qualifier)- estimated value <RL and ≥ MDL
J - estimated value
JN - presence of an analyte that has been "tentatively identified" and the associated numerical value

ANALYSES DATA PACKAGE COVER PAGE

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Laboratory: COMPUCHEM

SDG: 1408019

Client Sample Id:	Analysis:	Lab Sample Id:
P001-COMP01-LW-01	8081A	1408019-01
P001-COMP01-LW-01	8081A	1408019-01RE1
P001-DR0314-LW-01	8081A	1408019-02
P001-PL0202-SW-01	8081A	1408019-03
P001-DR0310-LW-01	8081A	1408019-04
P001-DR0312-LW-01	8081A	1408019-05
P001-DR0702-SW-01	8081A	1408019-06
P001-DR0302-LW-01	8081A	1408019-07
P001-DR0501-LW-01	8081A	1408019-08
P001-UST01-LW-01	8081A	1408019-10

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions addressed in the narrative. Release of the data contained in this hardcopy data package and in the Electronic Data Deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Quentisha Forrester Name: Quentisha Forrester

Date: 08/21/2014 Title: Chemist III

CompuChem
A Division Of
Liberty Analytical Corp.

501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050

CompuChem
A division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100Fax: 919/379-4050

SDG NARRATIVE
SDG # 1408019
PROTOCOL: SW-846

SAMPLE IDENTIFICATIONS: P001-COMP01-LW-01 P001-DR0314-LW-01 P001-PL0202-SW-01 P001-DR0310-LW-01 P001-DR0312-LW-01 P001-DR0702-SW-01 P001-DR0302-LW-01 P001-DR0501-LW-01 P001-UST01-LW-01

The 9 soil samples listed above were received intact, ambient between 24.2°C and 24.6°C, with proper documentation, in sealed shipping containers, on August 7, 2014. The samples were scheduled for the requested analysis of the Pesticide fraction. SW-846, 3rd Edition, Update 4, Method Waste Dilution (3580A)/8081B was used to prepare and analyze the samples, with the exceptions and/or additions requested by the client. All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices are included in the sample data sections.

Pesticide

Extraction and analysis holding time requirements were met for the samples. Sulfur cleanup was performed on the samples with a Sulfur cleanup Blank.

Target analytes were confirmed above the reporting limits in the samples. Samples P001-COMP01-LW-01, P001-DR0310-LW-01, P001-DR0312-LW-01, P001-DR0702-SW-01, P001-DR0302-LW-01 and P001-DR0501-LW-01 were initially analyzed at a dilution. In the initial analysis of sample P001-COMP01-LW-01, the on-column amount of some target compounds exceeded the instrument's analytical range as defined by the highest concentration level of the Initial Calibration and the surrogate recovery of Tetrachloro-m-Xylene was outside of QC limits. The sample was reanalyzed using a smaller aliquot of raw sample to bring the on-column amount into range and the surrogate recoveries met QC criteria. We have reported both analyses of sample P001-COMP01-LW-01.

Manual integrations were performed on one or more of the process files associated with this SDG. Please see the detailed Manual Integration Summary report that is located in section P. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

All QC criteria were met for all initial, second source and continuing calibration standards associated to this SDG with the following exceptions. For the second source standard PESTCHKRA (4H09001-SCV1), the %Drift was outside of QC limits for methoxychlor on both columns. The continuing calibration standard 4H15017-CCV1 failed.

All of the surrogate recoveries met control criteria with the following exceptions. The surrogate recoveries for Decachlorobiphenyl were outside of QC criteria in the analyses of P001-DR0314-LW-01, P001-DR0302-LW-01 and P001-DR0501-LW-01 due to the sample matrix. The surrogate recoveries for Tetrachloro-m-Xylene were outside of QC criteria in the analyses of P001-COMP01-LW-01, P001-DR0310-LW-01, P001-DR0312-LW-01and P001-DR0302-LW-01 due to the sample matrix. We have reported the analyses of these samples.

The method blank associated with the samples met all quality control criteria.

The Laboratory Control Samples (LCS/LCSD) prepared and analyzed with the sample met all quality control criteria with the following exceptions. In the analyses of PLCSBN/PLCSDBN, the Relative Percent Difference was outside of QC limits for beta-BHC on both columns.

An uncertainty of these test results may be estimated from the recovery of the surrogates added to the sample prior to sample preparation or from the recovery of spiked compound(s) in the associated laboratory control sample. Further information is available upon request.

I certify that the tests used in this report meet all requirements of the NELAC standards unless otherwise stated in the SDG narrative or QA notice. I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on CD has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Quentisha Forrester
Chemist III
August 21, 2014

ANALYSIS DATA SHEET

8081A

P001-COMP01-LW-01

Client: WESTON SOLUTIONS | SDG: 1408019 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 084r1408019-01.d | Sampled: 08/06/14 00:00

Initial/Final: 1g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408019-01 | Received: 08/07/14 09:03

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:49

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/13/14 18:34

Batch: 4080808 | Sequence: 4H13009 | Calibration: 4081103 | Instrument: tracegc84

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC	~~240~~ 2490	26.4	249	~~JDP~~ U J
58-89-9	gamma-BHC (Lindane)	~~94.0~~ 2490	12.0	249	~~JDP~~ U J
76-44-8	Heptachlor	~~70.5~~ 2490	36.0	249	~~JDP~~ U J
309-00-2	Aldrin	1240	20.1	249	~~D~~ J
319-85-7	beta-BHC	~~179~~ 2490	42.0	249	~~JDP~~ U J
319-86-8	delta-BHC	75.0	23.8	249	~~JDP~~ J
1024-57-3	Heptachlor Epoxide	~~118~~ 2490	15.9	249	JDP U J
5103-74-2	gamma-Chlordane	455	19.8	249	~~D~~ J
5103-71-9	alpha-Chlordane	523	24.3	249	~~DP~~ NJ
959-98-8	Endosulfan I	505	23.1	249	~~DP~~ J
72-55-9	4,4'-DDE	~~96.0~~ 630	21.6	630	JDP U J
60-57-1	Dieldrin	142	16.8	630	~~JDP~~ J
72-20-8	Endrin	711	14.1	630	~~DP~~ NJ
72-54-8	4,4'-DDD	~~61.0~~ 630	24.3	630	~~JDP~~ U J
33213-65-9	Endosulfan II	* ~~39700~~ 32900	26.7	630	~~DP~~ J
50-29-3	4,4'-DDT		75.0	630	U J
7421-93-4	Endrin Aldehyde	~~115~~ 630	39.0	630	~~JDP~~ U J
1031-07-8	Endosulfan Sulfate		18.6	630	U J
72-43-5	Methoxychlor	~~1010~~ 2490	87.0	2490	~~JDP~~ U J
53494-70-5	Endrin Ketone	~~120~~ 630	15.3	630	~~JDP~~ U J
8001-35-2	Toxaphene		4500	24900	U J

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	186.0	62	43 - 144	D
DCB (A) [2C]	300.0	443.5	148	43 - 144	D
TCX (A)	150.0	1107	738	43 - 135	D
TCX (A) [2C]	150.0	ND		43 - 135	D

* Values outside of QC limits

* values transferred from 50* dilution analysis

CompuChem
A Division Of
Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8081A

P001-COMP01-LW-01DL

Client: WESTON SOLUTIONS SDG: 1408019 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550B_GC File ID: 022n1408019-01.d Sampled: 08/06/14 00:00

Initial/Final: 1g / 5000uL Sulfur Cleanup: N Lab ID: 1408019-01RE1 Received: 08/07/14 09:03

Dilution: 50 pH: Florisil Cleanup: N Prepared: 08/12/14 09:49

% Moisture: NA GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/18/14 21:15

Batch: 4080808 Sequence: 4H15017 Calibration: 4082101 Instrument: tracegc80

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC	358	132	1250	~~JDP~~ J
58-89-9	gamma-BHC (Lindane)		60.0	1250	U J
76-44-8	Heptachlor		180	1250	U J
309-00-2	Aldrin	1050	101	1250	~~JD~~ J
319-85-7	beta-BHC	338	210	1250	~~JD~~ J
319-86-8	delta-BHC		119	1250	U J
1024-57-3	Heptachlor Epoxide	270	79.5	1250	~~JDP~~ J
5103-74-2	gamma-Chlordane		99.0	1250	U J
5103-71-9	alpha-Chlordane	~~940~~ 1250	122	1250	~~JDP~~ UJ
959-98-8	Endosulfan I	143	116	1250	~~JDP~~ J
72-55-9	4,4'-DDE	~~4980~~ 3150	108	3150	~~JDP~~ UJ
60-57-1	Dieldrin		84.0	3150	U J
72-20-8	Endrin	~~134~~ 3150	70.5	3150	~~JDP~~ UJ
72-54-8	4,4'-DDD	129	122	3150	~~JDP~~ J
33213-65-9	Endosulfan II	32900	134	3150	~~JD~~ J
50-29-3	4,4'-DDT		375	3150	U J
7421-93-4	Endrin Aldehyde	363 J	195	3150	~~JDP~~ J
1031-07-8	Endosulfan Sulfate	~~1310~~ 3150	93.0	3150	~~JDP~~ UJ
72-43-5	Methoxychlor	2310	435	12500	~~JD~~ J
53494-70-5	Endrin ketone	~~156~~ 3150	76.5	3150	~~JDP~~ UJ
8001-35-2	Toxaphene		22500	125000	U J

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	400.0	133	43 - 144	D
DCB (A) [2C]	300.0	1088	363	43 - 144	D
TCX (A)	150.0	1180	787	43 - 135	D
TCX (A) [2C]	150.0	96.50	64	43 - 135	D

* Values outside of QC limits

Do Not use this from I.

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8081A

P001-DR0314-LW-01

Client: WESTON SOLUTIONS | SDG: 1408019 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 081r1408019-02.d | Sampled: 08/06/14 00:00

Initial/Final: 1g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408019-02 | Received: 08/07/14 09:03

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:49

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/13/14 17:03

Batch: 4080808 | Sequence: 4H13009 | Calibration: 4081103 | Instrument: tracegc84

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC		2.64	24.9	~~U~~ R
58-89-9	gamma-BHC (Lindane)		1.20	24.9	~~U~~ R
76-44-8	Heptachlor		3.60	24.9	~~U~~ R
309-00-2	Aldrin	6.15	2.01	24.9	~~JP~~ J
319-85-7	beta-BHC		4.20	24.9	~~U~~ R
319-86-8	delta-BHC	4.87	2.38	24.9	~~JP~~ J
1024-57-3	Heptachlor Epoxide		1.59	24.9	~~U~~ R
5103-74-2	gamma-Chlordane	12.9	1.98	24.9	J
5103-71-9	alpha-Chlordane	3.91	2.43	24.9	~~JP~~ J
959-98-8	Endosulfan I		2.31	24.9	~~U~~ R
72-55-9	4,4'-DDE	5.05	2.16	63.0	~~JP~~ J
60-57-1	Dieldrin		1.68	63.0	~~U~~ R
72-20-8	Endrin	5.95	1.41	63.0	~~JP~~ J
72-54-8	4,4'-DDD	3.27	2.43	63.0	~~JP~~ J
33213-65-9	Endosulfan II	4.29	2.67	63.0	~~JP~~ J
50-29-3	4,4'-DDT		7.50	63.0	~~U~~ R
7421-93-4	Endrin Aldehyde	6.70	3.90	63.0	~~JP~~ J
1031-07-8	Endosulfan Sulfate		1.86	63.0	~~U~~ R
72-43-5	Methoxychlor	14.5	8.70	249	~~JP~~ J
53494-70-5	Endrin Ketone	29.6	1.53	63.0	~~JP~~ J
8001-35-2	Toxaphene		450	2490	~~U~~ R

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	24.70	8	43 - 144	*
DCB (A) [2C]	300.0	150.6	50	43 - 144	
TCX (A)	150.0	149.0	99	43 - 135	
TCX (A) [2C]	150.0	85.50	57	43 - 135	

* Values outside of QC limits

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8081A

P001-PL0202-SW-01

Client: WESTON SOLUTIONS SDG: 1408019 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550B_GC File ID: 082r1408019-03.d Sampled: 08/06/14 00:00

Initial/Final: 1g / 5000uL Sulfur Cleanup: Y Lab ID: 1408019-03 Received: 08/07/14 09:03

Dilution: 1 pH: Florisil Cleanup: N Prepared: 08/12/14 09:49

% Moisture: NA GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/13/14 17:33

Batch: 4080808 Sequence: 4H13009 Calibration: 4081103 Instrument: tracegc84

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC		2.64	24.9	U
58-89-9	gamma-BHC (Lindane)		1.20	24.9	U
76-44-8	Heptachlor		3.60	24.9	U
309-00-2	Aldrin		2.01	24.9	U
319-85-7	beta-BHC		4.20	24.9	U
319-86-8	delta-BHC		2.38	24.9	U
1024-57-3	Heptachlor epoxide		1.59	24.9	U
5103-74-2	gamma-Chlordane		1.98	24.9	U
5103-71-9	alpha-Chlordane		2.43	24.9	U
959-98-8	Endosulfan I		2.31	24.9	U
72-55-9	4,4'-DDE		2.16	63.0	U
60-57-1	Dieldrin		1.68	63.0	U
72-20-8	Endrin		1.41	63.0	U
72-54-8	4,4'-DDD		2.43	63.0	U
33213-65-9	Endosulfan II		2.67	63.0	U
50-29-3	4,4'-DDT		7.50	63.0	U
7421-93-4	Endrin aldehyde		3.90	63.0	U
1031-07-8	Endosulfan sulfate		1.86	63.0	U
72-43-5	Methoxychlor		8.70	249	U
53494-70-5	Endrin ketone		1.53	63.0	U
8001-35-2	Toxaphene		450	2490	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	32.20	11	43 - 144	*
DCB (A) [2C]	300.0	30.60	10	43 - 144	*
TCX (A)	150.0	113.6	76	43 - 135	
TCX (A) [2C]	150.0	95.95	64	43 - 135	

* Values outside of QC limits

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8081A

P001-DR0310-LW-01

Client: WESTON SOLUTIONS SDG: 1408019 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550B_GC File ID: 085r1408019-04.d Sampled: 08/06/14 00:00

Initial/Final: 1g / 5000uL Sulfur Cleanup: Y Lab ID: 1408019-04 Received: 08/07/14 09:03

Dilution: 10 pH: Florisil Cleanup: N Prepared: 08/12/14 09:49

% Moisture: NA GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/13/14 19:04

Batch: 4080808 Sequence: 4H13009 Calibration: 4081103 Instrument: tracegc84

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC	~~86.0~~ 249	26.4	249	~~JDP~~ UJ
58-89-9	gamma-BHC (Lindane)	~~103~~ 249	12.0	249	~~JDP~~ UJ
76-44-8	Heptachlor	60.0	36.0	249	~~JD~~ J
309-00-2	Aldrin	~~198~~ 249	20.1	249	~~JDP~~ UJ
319-85-7	beta-BHC		42.0	249	U J
319-86-8	delta-BHC	42.1	23.8	249	~~JDP~~ J
1024-57-3	Heptachlor epoxide	~~18.5~~ 249	15.9	249	~~JDP~~ UJ
5103-74-2	gamma-Chlordane		19.8	249	U J
5103-71-9	alpha-Chlordane		24.3	249	U J
959-98-8	Endosulfan I	38.6	23.1	249	~~JDP~~ J
72-55-9	4,4'-DDE	~~25.4~~ 630	21.6	630	~~JDP~~ UJ
60-57-1	Dieldrin	~~21.6~~ 630	16.8	630	~~JDP~~ UJ
72-20-8	Endrin		14.1	630	U J
72-54-8	4,4'-DDD		24.3	630	U J
33213-65-9	Endosulfan II	49.6	26.7	630	~~JDP~~ J
50-29-3	4,4'-DDT		75.0	630	U J
7421-93-4	Endrin Aldehyde	154	39.0	630	~~JDP~~ J
1031-07-8	Endosulfan sulfate	24.2	18.6	630	~~JD~~ J
72-43-5	Methoxychlor		87.0	2490	U J
53494-70-5	Endrin Ketone		15.3	630	U J
8001-35-2	Toxaphene		4500	24900	U J

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	364.5	122	43 - 144	D
DCB (A) [2C]	300.0	294.0	98	43 - 144	D
TCX (A)	150.0	287.5	192	43 - 135	D
TCX (A) [2C]	150.0	675.0	450	43 - 135	D

* Values outside of QC limits

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8081A

P001-DR0312-LW-01

Client: WESTON SOLUTIONS SDG: 1408019 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550B_GC File ID: 087r1408019-05.d Sampled: 08/06/14 00:00

Initial/Final: 1g / 5000uL Sulfur Cleanup: Y Lab ID: 1408019-05 Received: 08/07/14 09:03

Dilution: 50 pH: Florisil Cleanup: N Prepared: 08/12/14 09:49

% Moisture: NA GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/13/14 20:05

Batch: 4080808 Sequence: 4H13009 Calibration: 4081103 Instrument: tracegc84

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC	~~338~~ 1250	132	1250	~~JDP~~ U J
58-89-9	gamma-BHC (Lindane)	~~220~~ 1250	60.0	1250	~~JDP~~ U J
76-44-8	Heptachlor	505	180	1250	~~JDP~~ * J
309-00-2	Aldrin	~~388~~ 1250	101	1250	~~JDP~~ U J
319-85-7	beta-BHC		210	1250	U J
319-86-8	delta-BHC		119	1250	U J
1024-57-3	Heptachlor epoxide	~~965~~ 1250	79.5	1250	~~JDP~~ U J
5103-74-2	gamma-Chlordane		99.0	1250	U J
5103-71-9	alpha-Chlordane		122	1250	U J
959-98-8	Endosulfan I	295	116	1250	~~JDP~~ J
72-55-9	4,4'-DDE	~~723~~ 3150	108	3150	~~JDP~~ U J
60-57-1	Dieldrin		84.0	3150	U J
72-20-8	Endrin		70.5	3150	U J
72-54-8	4,4'-DDD		122	3150	U J
33213-65-9	Endosulfan II	270	134	3150	~~JDP~~ J
50-29-3	4,4'-DDT		375	3150	U J
7421-93-4	Endrin aldehyde		195	3150	U J
1031-07-8	Endosulfan sulfate		93.0	3150	U J
72-43-5	Methoxychlor		435	12500	U J
53494-70-5	Endrin Ketone	242	76.5	3150	~~JDP~~ J
8001-35-2	Toxaphene		22500	125000	U J

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	462.5	154	43 - 144	D
DCB (A) [2C]	300.0	216.0	72	43 - 144	D
TCX (A)	150.0	216.3	144	43 - 135	D
TCX (A) [2C]	150.0	922.5	615	43 - 135	D

* Values outside of QC limits

+ "p" qualifier not required.

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8081A

P001-DR0702-SW-01

Client: WESTON SOLUTIONS SDG: 1408019 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550B_GC File ID: 023n1408019-06.d Sampled: 08/06/14 00:00

Initial/Final: 1.1g / 5000uL Sulfur Cleanup: Y Lab ID: 1408019-06 Received: 08/07/14 09:03

Dilution: 10 pH: Florisil Cleanup: N Prepared: 08/12/14 09:49

% Moisture: NA GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/18/14 21:44

Batch: 4080808 Sequence: 4H15017 Calibration: 4082101 Instrument: tracegc80

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC		24.0	226	U
58-89-9	gamma-BHC (Lindane)		10.9	226	U
76-44-8	Heptachlor		32.7	226	U
309-00-2	Aldrin		18.3	226	U
319-85-7	beta-BHC		38.2	226	U
319-86-8	delta-BHC		21.6	226	U
1024-57-3	Heptachlor epoxide		14.5	226	U
5103-74-2	gamma-Chlordane		18.0	226	U
5103-71-9	alpha-Chlordane		22.1	226	U
959-98-8	Endosulfan I		21.0	226	U
72-55-9	4,4'-DDE		19.6	573	U
60-57-1	Dieldrin		15.3	573	U
72-20-8	Endrin		12.8	573	U
72-54-8	4,4'-DDD		22.1	573	U
33213-65-9	Endosulfan II		24.3	573	U
50-29-3	4,4'-DDT		68.2	573	U
7421-93-4	Endrin aldehyde		35.5	573	U
1031-07-8	Endosulfan sulfate		16.9	573	U
72-43-5	Methoxychlor		79.1	2260	U
53494-70-5	Endrin ketone		13.9	573	U
8001-35-2	Toxaphene		4090	22600	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	272.7	301.4	111	43 - 144	D
DCB (A) [2C]	272.7	348.2	128	43 - 144	D
TCX (A)	136.4	105.5	77	43 - 135	D
TCX (A) [2C]	136.4	189.5	139	43 - 135	D

* Values outside of QC limits

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8081A

P001-DR0302-LW-01

Client: WESTON SOLUTIONS SDG: 1408019 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550B_GC File ID: 086r1408019-07.d Sampled: 08/06/14 00:00

Initial/Final: 1g / 5000uL Sulfur Cleanup: Y Lab ID: 1408019-07 Received: 08/07/14 09:03

Dilution: 10 pH: Florisil Cleanup: N Prepared: 08/12/14 09:49

% Moisture: NA GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/13/14 19:35

Batch: 4080808 Sequence: 4H13009 Calibration: 4081103 Instrument: tracegc84

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC	~~96.0~~ 249	26.4	249	~~JDP~~ UJ
58-89-9	gamma-BHC (Lindane)	60.0	12.0	249	~~JDP~~ J
76-44-8	Heptachlor	57.5	36.0	249	~~JD~~ J
309-00-2	Aldrin		20.1	249	U J
319-85-7	beta-BHC		42.0	249	U J
319-86-8	delta-BHC	~~50.0~~ 249	23.8	249	~~JDP~~ UJ
1024-57-3	Heptachlor Epoxide	~~99.5~~ 249	15.9	249	~~JDP~~ UJ
5103-74-2	gamma-Chlordane	~~21.5~~ 249	19.8	249	~~JDP~~ UJ
5103-71-9	alpha-Chlordane		24.3	249	U J
959-98-8	Endosulfan I		23.1	249	U J
72-55-9	4,4'-DDE	~~22.7~~ 630	21.6	630	~~JDP~~ UJ
60-57-1	Dieldrin	25.7	16.8	630	~~JDP~~ J
72-20-8	Endrin	~~15.1~~ 630	14.1	630	~~JDP~~ UJ
72-54-8	4,4'-DDD		24.3	630	U J
33213-65-9	Endosulfan II	~~22.7~~ 630	26.7	630	~~JDP~~ UJ
50-29-3	4,4'-DDT		75.0	630	U J
7421-93-4	Endrin Aldehyde	~~45.0~~ 630	39.0	630	~~JDP~~ UJ
1031-07-8	Endosulfan Sulfate		18.6	630	U J
72-43-5	Methoxychlor		87.0	2490	U J
53494-70-5	Endrin Ketone		15.3	630	U J
8001-35-2	Toxaphene		4500	24900	U J

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	940.5	314	43 - 144	D
DCB (A) [2C]	300.0	651.5	217	43 - 144	D
TCX (A)	150.0	717.0	478	43 - 135	D
TCX (A) [2C]	150.0	361.0	241	43 - 135	D

* Values outside of QC limits

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8081A

P001-DR0501-LW-01

Client: WESTON SOLUTIONS | SDG: 1408019 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 089r1408019-08.d | Sampled: 08/06/14 00:00

Initial/Final: 1g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408019-08 | Received: 08/07/14 09:03

Dilution: 50 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:49

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/13/14 21:06

Batch: 4080808 | Sequence: 4H13009 | Calibration: 4081103 | Instrument: tracegc84

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC		132	1250	U J
58-89-9	gamma-BHC (Lindane)		60.0	1250	U
76-44-8	Heptachlor		180	1250	U
309-00-2	Aldrin	1250 ~~105~~	101	1250	~~JDP~~ UJ
319-85-7	beta-BHC		210	1250	U J
319-86-8	delta-BHC		119	1250	U
1024-57-3	Heptachlor Epoxide		79.5	1250	U
5103-74-2	gamma-Chlordane		99.0	1250	U
5103-71-9	alpha-Chlordane		122	1250	U
959-98-8	Endosulfan I		116	1250	U
72-55-9	4,4'-DDE		108	3150	U
60-57-1	Dieldrin		84.0	3150	U
72-20-8	Endrin		70.5	3150	U
72-54-8	4,4'-DDD		122	3150	U
33213-65-9	Endosulfan II		134	3150	U
50-29-3	4,4'-DDT		375	3150	U
7421-93-4	Endrin Aldehyde		195	3150	U
1031-07-8	Endosulfan sulfate		93.0	3150	U
72-43-5	Methoxychlor		435	12500	U
53494-70-5	Endrin Ketone	108	76.5	3150	~~JD~~ J
8001-35-2	Toxaphene		22500	125000	U J

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	79.00	26	43 - 144	D
DCB (A) [2C]	300.0	ND		43 - 144	D
TCX (A)	150.0	136.3	91	43 - 135	D
TCX (A) [2C]	150.0	412.5	275	43 - 135	D

* Values outside of QC limits

Environmental Testing Laboratories — CompuChem — A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8081A

P001-UST01-LW-01

Client: WESTON SOLUTIONS | SDG: 1408019 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 083r1408019-10.d | Sampled: 08/07/14 00:00

Initial/Final: 1g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408019-10 | Received: 08/07/14 09:04

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:49

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/13/14 18:04

Batch: 4080808 | Sequence: 4H13009 | Calibration: 4081103 | Instrument: tracegc84

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC		2.64	24.9	U
58-89-9	gamma-BHC (Lindane)		1.20	24.9	U
76-44-8	Heptachlor		3.60	24.9	U
309-00-2	Aldrin		2.01	24.9	U
319-85-7	beta-BHC		4.20	24.9	U
319-86-8	delta-BHC		2.38	24.9	U
1024-57-3	Heptachlor epoxide		1.59	24.9	U
5103-74-2	gamma-Chlordane		1.98	24.9	U
5103-71-9	alpha-Chlordane		2.43	24.9	U
959-98-8	Endosulfan I		2.31	24.9	U
72-55-9	4,4'-DDE		2.16	63.0	U
60-57-1	Dieldrin		1.68	63.0	U
72-20-8	Endrin		1.41	63.0	U
72-54-8	4,4'-DDD		2.43	63.0	U
33213-65-9	Endosulfan II		2.67	63.0	U
50-29-3	4,4'-DDT		7.50	63.0	U
7421-93-4	Endrin aldehyde		3.90	63.0	U
1031-07-8	Endosulfan sulfate		1.86	63.0	U
72-43-5	Methoxychlor		8.70	249	U
53494-70-5	Endrin ketone		1.53	63.0	U
8001-35-2	Toxaphene		450	2490	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	428.0	143	43 - 144	
DCB (A) [2C]	300.0	372.8	124	43 - 144	
TCX (A)	150.0	207.4	138	43 - 135	*
TCX (A) [2C]	150.0	189.0	126	43 - 135	

* Values outside of QC limits

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

B. Chain of Custody Records

The laboratory shall include a copy of the Chain-of-Custody (CoC) documentation for all of the samples in the Work Order/SDG.

Can 1 of 3

USEPA
DateShipped: 8/6/2014
CarrierName: FedEx
AirbillNo: 502978208623

CHAIN OF CUSTODY RECORD
Case #: 306
Contact Name: Peter Lisichenko
Contact Phone: 6035124350

No: 2-080614-124106-0001
Cooler #: 1A
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
408619-01	P001-COMP01-LW-01	Area03	VOCs	Liquid Waste	8/6/2014	1	4 oz	None	N
	P001-COMP01-LW-01	Area03	SVOC+PCB+PEST	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-COMP01-LW-01	Area03	RCRA	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-COMP01-LW-01	Area03	METALS+Hg	Liquid Waste	8/6/2014	1	500 ml	None	N
408619-02	P001-DR0314-LW-01	Area03	VOCs	Liquid Waste	8/6/2014	1	4 oz	None	N
	P001-DR0314-LW-01	Area03	SVOC+PCB+PEST	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-DR0314-LW-01	Area03	RCRA	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-DR0314-LW-01	Area03	METALS+Hg	Liquid Waste	8/6/2014	1	500 ml	None	N
408619-03	P001-PL0202-SW-01	Area02	VOCs	Solid Waste	8/6/2014	1	4 oz	None	N
	P001-PL0202-SW-01	Area02	SVOC+PCB+PEST	Solid Waste	8/6/2014	1	8 oz	None	N
	P001-PL0202-SW-01	Area02	RCRA	Solid Waste	8/6/2014	1	8 oz	None	N
	P001-PL0202-SW-01	Area02	METALS+Hg	Solid Waste	8/6/2014	1	~~2 oz~~ 4oz recd 402 jar @ 8/7/14	None	N

Special Instructions: RFP 306
Analyze lower phase (green liquid) for P001-DR0314-01. All others should be upper phase.

recd @ 24.6°C ambient / in can for dangerous goods @ 8/7/14

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL SAMPLES ALL ANALYSIS	(WESSON)	8/6/14	CompuChem	8/7/14 0903	good condition @ 8/7/14

Can 2 of 3

USEPA
DateShipped: 8/6/2014
CarrierName: FedEx
AirbillNo: 502978208623

CHAIN OF CUSTODY RECORD
Case #: 306
Contact Name: Peter Lisichenko
Contact Phone: 6035124350

No: 2-080614-125105-0002
Cooler #: 1B
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
140809-04	P001-DR0310-LW-01	Area03	VOCs	Liquid Waste	8/6/2014	1	4 oz	None	N
	P001-DR0310-LW-01	Area03	SVOC+PCB+PEST	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-DR0310-LW-01	Area03	RCRA	Liquid Waste	8/6/2014	1	8 oz	None	N
↓	P001-DR0310-LW-01	Area03	METALS+Hg	Liquid Waste	8/6/2014	1	500 ml	None	N
140809-05	P001-DR0312-LW-01	Area03	VOCs	Liquid Waste	8/6/2014	1	4 oz	None	N
	P001-DR0312-LW-01	Area03	SVOC+PCB+PEST	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-DR0312-LW-01	Area03	RCRA	Liquid Waste	8/6/2014	1	8 oz	None	N
↓	P001-DR0312-LW-01	Area03	METALS+Hg	Liquid Waste	8/6/2014	1	500 ml	None	N
140809-06	P001-DR0702-SW-01	Area07	VOCs	Solid Waste	8/6/2014	1	4 oz	None	N
	P001-DR0702-SW-01	Area07	SVOC+PCB+PEST	Solid Waste	8/6/2014	1	8 oz	None	N
	P001-DR0702-SW-01	Area07	RCRA	Solid Waste	8/6/2014	1	8 oz	None	N
↓	P001-DR0702-SW-01	Area07	METALS+Hg	Solid Waste	8/6/2014	1	~~2 oz~~ 4oz jar received @ 8/7/14	None	N

Special Instructions: RFP 306
Analyze upper phase of liquids

recd @ 24.4°C ambient / in con for dangerous goods @ 8/7/14

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL SAMPLES ALL ANALYSIS	(WESTON)	8/6/14	Compu Chem	8/7/14 0903	good condition @ 8/7/14

Can 3 of 3

USEPA
DateShipped: 8/6/2014
CarrierName: FedEx
AirbillNo: 502978208623

CHAIN OF CUSTODY RECORD
Case #: 306
Contact Name: Peter Lisichenko
Contact Phone: 6035124350

No: 2-080614-130807-0003
Cooler #: 1C
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
1408019-07	P001-DR0302-LW-01	Area03	VOCs	Liquid Waste	8/6/2014	1	4 oz	None	N
	P001-DR0302-LW-01	Area03	SVOC+PCB+PEST	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-DR0302-LW-01	Area03	RCRA	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-DR0302-LW-01	Area03	METALS+Hg	Liquid Waste	8/6/2014	1	500 ml	None	N
1408019-08	P001-DR0501-LW-01	Area05	VOCs	Liquid Waste	8/6/2014	1	4 oz	None	N
	P001-DR0501-LW-01	Area05	SVOC+PCB+PEST	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-DR0501-LW-01	Area05	RCRA	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-DR0501-LW-01	Area05	METALS+Hg	Liquid Waste	8/6/2014	1	500 ml	None	N
1408019-09	P001-DR0703-LW-01	Area07	RCRA	Liquid Waste	8/6/2014	1	8 oz	None	N

Special Instructions: RFP 306
Analyze upper phase of liquids

rec'd @ 24.2°C
ambient/in can for
dangerous goods @ 8/7/14

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL ITEMS/ ALL ANALYSES	(WESTON)	8/6/14	CompuChem	8/7/14 0903	good condition @ 8/7/14

USEPA
DateShipped: 8/7/2014
CarrierName: FedEx
AirbillNo: 7707 8581 7446

CHAIN OF CUSTODY RECORD
Case #: 306
Contact Name: Peter Lisichenko
Contact Phone: 6035124350

No: 2-080714-151350-0005
Cooler #: 2A
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
1408014-01	P001-S006-0002-01	P001-S006	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S006-0002-01	P001-S006	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408019-10	P001-UST01-LW-01	UST01	VOCs	Liquid Waste	8/7/2014	1	4 oz	None	N
	P001-UST01-LW-01	UST01	SVOC+PCB+PEST	Liquid Waste	8/7/2014	1	8 oz	None	N
	P001-UST01-LW-01	UST01	RCRA	Liquid Waste	8/7/2014	1	8 oz	None	N
	P001-UST01-LW-01	UST01	METALS+Hg	Liquid Waste	8/7/2014	1	500 ml	None	N
1408024-05	P001-S001-0002-01	P001-S001	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S001-0002-01	P001-S001	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S001-0002-01	P001-S001	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S001-0002-01	P001-S001	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N

Special Instructions: RFP 306

recd @ 5.2°C

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL SAMPLES ALL ANALYSIS	(WESTON)	8/7/14	Judy Doy/CompuChem	8/8/14 0904	good condition 8/8/14

ANALYSES DATA PACKAGE COVER PAGE

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Laboratory: COMPUCHEM

SDG: 1408028

Client Sample Id:	Analysis:	Lab Sample Id:
P001-COMP02-LW-01	8081A	1408028-01
P001-DR0502-LW-01	8081A	1408028-02

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions addressed in the narrative. Release of the data contained in this hardcopy data package and in the Electronic Data Deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Quentisha Forrester

Name: Quentisha Forrester

Date: 08/22/2014

Title: Chemist III

CompuChem
A Division Of
Liberty Analytical Corp.

501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050

CompuChem
A division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100Fax: 919/379-4050

SDG NARRATIVE
SDG # 1408028
PROTOCOL: SW-846

SAMPLE IDENTIFICATIONS: P001-COMP02-LW-01 P001-DR0502-LW-01

The 2 soil samples listed above were received intact, ambient at 24.5°C, with proper documentation, in sealed shipping containers, on August 12, 2014. The samples were scheduled for the requested analysis of the Pesticide fraction. SW-846, 3rd Edition, Update 4, Method 8081B was used to prepare and analyze the samples, with the exceptions and/or additions requested by the client. All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices are included in the sample data sections.

Pesticide

Extraction and analysis holding time requirements were met for the samples. Samples were prepped by diluting 1.0g of sample to 5 mL in Hexane, and then analyzed by 8081B Method. Sulfur cleanup was performed on the samples with a Sulfur cleanup Blank.

Target analytes were confirmed above the reporting limits in the samples. Sample P001-COMP02-LW-01 was initially analyzed at a dilution. In the analysis of sample P001-COMP02-LW-01, the surrogate recoveries of Decachlorobiphenyl and Tetrachloro-m-Xylene were outside of QC limits due to sample matrix. In the analysis of sample P001-DR0502-LW-01, the surrogate recovery of Tetrachloro-m-Xylene was outside of QC limits due to sample matrix. For sample P001-DR0502-LW-01, since peaks fell within the retention time window of Dieldrin we had to report is as such, but based on the peak shapes it was clear that the peaks were due to sample matrix so no further action was taken. We have reported the initial analyses of samples P001-COMP02-LW-01 and P001-DR0502-LW-01.

Manual integrations were performed on one or more of the process files associated with this SDG. Please see the detailed Manual Integration Summary report that is located in section P. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

All QC criteria were met for all initial, second source and continuing calibration standards associated to this SDG with the following exceptions. The continuing calibration standard 4H15017-CCV1 failed.

All of the surrogate recoveries met control criteria with the following exceptions. The surrogate recoveries for Decachlorobiphenyl were outside of QC criteria in the analyses of P001-DR0314-LW-01, P001-DR0302-LW-01 and P001-DR0501-LW-01 due to the sample matrix. The surrogate recoveries for Tetrachloro-m-Xylene were outside of QC criteria in the analyses of P001-COMP01-LW-01, P001-DR0310-LW-01, P001-DR0312-LW-01and P001-DR0302-LW-01 due to the sample matrix. We have reported the analyses of these samples.

The method blank associated with the samples met all quality control criteria.

Duplicate matrix spikes were not requested with this SDG.
The Laboratory Control Samples (LCS/LCSD) prepared and analyzed with the sample met all quality control criteria with the following exceptions. Decachlorobiphenyl was biased high in the analysis of PLCSBZ.

An uncertainty of these test results may be estimated from the recovery of the surrogates added to the sample prior to sample preparation or from the recovery of spiked compound(s) in the associated laboratory control sample. Further information is available upon request.

I certify that the tests used in this report meet all requirements of the NELAC standards unless otherwise stated in the SDG narrative or QA notice. I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on CD has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Quentisha Forrester
Chemist III
August 22, 2014
Revised October 1, 2014
Steven L. Pruskin
Technical Director

CompuChem

A division of Liberty Analytical Corporation

Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC/HPLC chemists. An Extracted Ion Current Profile (EICP) or a GC/HPLC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC/HPLC analysis. The manual editing/integration flags are:

M - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak. The most common reasons for performing manual integrations/editing are: the compound was not found by the automatic integration routine, the compound was incorrectly integrated by the automatic integration routine, and the co-eluting compounds were incorrectly integrated by the automatic integration routine.

H - Denotes that the data reviewer, GC/MS operator, or GC/HPLC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

MH - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

L - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

ML - Denotes that an alternate GC/MS library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

These codes will appear in the GC/MS and GC/HPLC raw data.

Revision 8 (01/29/2011)

CompuChem

A division of Liberty Analytical Corporation

CompuChem's Pagination Convention

As required by the EPA CLP Statement of Work (SOW) documents, data to be delivered must be paginated (by machine or hand). In the event that the initial numbering is incorrect (a page numbered twice or a page skipped, for example), it is CompuChem's policy to add an alphabetic suffix to a page number when necessary (e.g., 100A, 100B, etc.). This policy is also applicable to non-CLP data packages.

Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC/HPLC chemists. An Extracted Ion Current Profile (EICP) or a GC/HPLC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC/HPLC analysis. The manual editing/integration flags are:

M - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak. The most common reasons for performing manual integrations/editing are: the compound was not found by the automatic integration routine, the compound was incorrectly integrated by the automatic integration routine, and the co-eluting compounds were incorrectly integrated by the automatic integration routine.

H - Denotes that the data reviewer, GC/MS operator, or GC/HPLC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

MH - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

L - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

ML - Denotes that an alternate GC/MS library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

These codes will appear in the GC/MS and GC/HPLC raw data.

ORGANIC DATA REPORTING QUALIFIERS

On the appropriate reporting form, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on the appropriate reporting form for each compound. The qualifiers used are:

U: This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J: This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1:1 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide and/or Aroclor or other GC or HPLC identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.

N: This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search and must be used with the J flag. For generic characterization of a TIC such as "chlorinated hydrocarbon" (or for an "unknown," with no matches ≥ 85%), the N flag is not used.

P: In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the Form I and flagged with a P.
For SW-846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the lower of the two values is reported and flagged with a P on the reporting form. When the RPD is equal to or less than 40%, our policy is to also report the lower of the two values, although the choice could be a project specific issue. These SW-846 policies are consistent with Method 8000C. If Method 8000B is required, the higher of the two values is reported. For certain HPLC analyses, if one of the HPLC columns displays co-elution of target analytes, all results are reported from a primary column displaying no co-elution. Results are still flagged with a P if the RPD between columns is greater than 40%.

C: This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

DATA REPORTING QUALIFIERS (continued)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a concentration greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a concentration greater than the upper level of the calibration range will have the result flagged with an E on the appropriate reporting form for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on the appropriate reporting form for the more diluted sample, and **all** reported concentrations on that form are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate reporting forms are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses are not combined on a single reporting form.

A: This flag indicates that a TIC is a suspected aldol-condensation product.

S: In the SOM01.2 SOW document, this flag is used to indicate an estimated value for Aroclor target compounds where a valid 5-point initial calibration was not performed prior to the analytes detection in a sample. If an "S" flag is used for a specific Aroclor, then a reanalysis of the sample is required after a valid 5-point calibration is performed for the detected Aroclor. The "S" flag is not utilized for non CLP analyses.

* This flag is applied to a target analyte when any QC acceptance criterion has not been met for that analyte. The flag appears on the reporting form of the associated QC analysis.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y, and Z.

ANALYSIS DATA SHEET

8081A

P001-COMP02-LW-01

Client: WESTON SOLUTIONS | SDG: 1408028 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 019n1408028-01.d | Sampled: 08/06/14 00:00

Initial/Final: 1g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408028-01 | Received: 08/12/14 08:58

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/13/14 14:18

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/18/14 19:48

Batch: 4081306 | Sequence: 4H15017 | Calibration: 4082101 | Instrument: tracegc80

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC	~~441~~ 756	26.4	249	~~DP~~ J
58-89-9	gamma-BHC (Lindane)		12.0	249	U J
76-44-8	Heptachlor		36.0	249	U J
309-00-2	Aldrin	~~398~~ 439	20.1	249	~~D~~ J
319-85-7	beta-BHC	~~1040~~ 1730	42.0	249	~~DP~~ J
319-86-8	delta-BHC	~~53.5~~ ~~110~~ 249	23.8	249	~~JDP~~ UJ
1024-57-3	Heptachlor epoxide	~~69.5~~ 506	15.9	249	~~JDP~~ JN
5103-74-2	gamma-Chlordane	~~226~~ 588	19.8	249	~~JDP~~ JN
5103-71-9	alpha-Chlordane	~~82.5~~ 94.5	24.3	249	~~JD~~ J
959-98-8	Endosulfan I		23.1	249	U J
72-55-9	4,4'-DDE	~~348~~ 843	21.6	630	~~JDP~~ JN
60-57-1	Dieldrin	~~43.1~~ 66	16.8	630	~~JDP~~ J
72-20-8	Endrin	~~42.2~~ ~~241~~ 630	14.1	630	~~JDP~~ UJ
72-54-8	4,4'-DDD	~~141~~ ~~333~~ 630	24.3	630	~~JDP~~ UJ
33213-65-9	Endosulfan II	~~109~~ 114	26.7	630	~~JD~~ J
50-29-3	4,4'-DDT	~~335~~ 532	75.0	630	JDP J
7421-93-4	Endrin Aldehyde	~~338~~ ~~457~~ 630	39.0	630	~~JDP~~ UJ
1031-07-8	Endosulfan Sulfate		18.6	630	U J
72-43-5	Methoxychlor	~~111~~ 5710	87.0	2490	~~JDP~~ JN
53494-70-5	Endrin Ketone	~~297~~ 356	15.3	630	~~JD~~ J
8001-35-2	Toxaphene		4500	24900	U J

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	92.00	31	43 - 144	D
DCB (A) [2C]	300.0	533.0	178	43 - 144	D
TCX (A)	150.0	ND		43 - 135	D
TCX (A) [2C]	150.0	316.0	211	43 - 135	D

* Values outside of QC limits

CompuChem
A Division Of
Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

8081A

P001-DR0502-LW-01

Client: WESTON SOLUTIONS | SDG: 1408028 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 020n1408028-02.d | Sampled: 08/06/14 00:00

Initial/Final: 1g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408028-02 | Received: 08/12/14 08:58

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/13/14 14:18

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/18/14 20:17

Batch: 4081306 | Sequence: 4H15017 | Calibration: 4082101 | Instrument: tracegc80

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC	* 95.0 ~~13.3~~	2.64	24.9	* JN
58-89-9	gamma-BHC (Lindane)	* 3.44 ~~2.52~~	1.20	24.9	* J
76-44-8	Heptachlor		3.60	24.9	U J
309-00-2	Aldrin		2.01	24.9	U
319-85-7	beta-BHC		4.20	24.9	U
319-86-8	delta-BHC		2.38	24.9	U
1024-57-3	Heptachlor epoxide		1.59	24.9	U
5103-74-2	gamma-Chlordane		1.98	24.9	U
5103-71-9	alpha-Chlordane		2.43	24.9	U
959-98-8	Endosulfan I		2.31	24.9	U
72-55-9	4,4'-DDE		2.16	63.0	U
60-57-1	Dieldrin	* 4380 ~~281.0~~	1.68	63.0	* J
72-20-8	Endrin		1.41	63.0	U J
72-54-8	4,4'-DDD	* 4714 ~~60.6~~	2.43	63.0	* JN
33213-65-9	Endosulfan II		2.67	63.0	U J
50-29-3	4,4'-DDT	* 589 ~~110~~	7.50	63.0	* NJ
7421-93-4	Endrin aldehyde		3.90	63.0	U J
1031-07-8	Endosulfan sulfate	* 286 ~~187~~	1.86	63.0	* J
72-43-5	Methoxychlor	* ~~218~~ ~~187~~ 249	8.70	249	* UJ
53494-70-5	Endrin Ketone	* 161 ~~94.9~~	1.53	63.0	* J
8001-35-2	Toxaphene		450	2490	U J

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	317.3	106	43 - 144	
DCB (A) [2C]	300.0	255.9	85	43 - 144	
TCX (A)	150.0	ND		43 - 135	*
TCX (A) [2C]	150.0	72.80	49	43 - 135	

* Values outside of QC limits

* values transferred from the Colum 2.

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

B. Chain of Custody Records

The laboratory shall include a copy of the Chain-of-Custody (CoC) documentation for all of the samples in the Work Order/SDG.

USEPA
DateShipped: 8/6/2014
CarrierName: FedEx
AirbillNo: 502978208656

CHAIN OF CUSTODY RECORD
Case #: 306
Contact Name: Peter Lisichenko
Contact Phone: 6035124350

No: 2-080614-131105-0004
Cooler #: 2A
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
1408028-01	P001-COMP02-LW-01	Area03	VOCs	Liquid Waste	8/6/2014	1	4 oz	None	N
	P001-COMP02-LW-01	Area03	SVOC+PCB+PEST	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-COMP02-LW-01	Area03	RCRA	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-COMP02-LW-01	Area03	METALS+Hg	Liquid Waste	8/6/2014	1	500 ml	None	N
1408028-02	P001-DR0502-LW-01	Area05	VOCs	Liquid Waste	8/6/2014	1	4 oz	None	N
	P001-DR0502-LW-01	Area05	SVOC+PCB+PEST	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-DR0502-LW-01	Area05	RCRA	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-DR0502-LW-01	Area05	METALS+Hg	Liquid Waste	8/6/2014	1	500 ml	None	N

Special Instructions: RFP 306
Analyze upper phase of liquids

rec'd @ 24.5°C (ambient in can)

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL SAMPLES ALL ANALYSIS	(WESTON)	8/6/14	Dey / Compuchem	8/12/14 0855	good condition 8/12/14